CE WORK IN UNIVERSITY DEPARTMENTS OF EDUCATION

FREDERIC ERNEST FARRINGTON
Associate Professor of Education, University of Texas

I. The Problem

ly a little less than sixty years ago the first course in n at an American university was inaugurated at Brown. [1] hort-lived experiment can hardly be considered a suc- ut nevertheless it serves to mark the beginning of a move- that has spread consistently for the last quarter of a ry, and that has expanded during the latter half of that d with remarkable celerity. It is significant to note that prospectus of that first course in education was eminently tical in its aim, at least, in spite of the encyclopædic char- r of its content, for it touched upon the fields of psychology, ool organization, educational theory in its dynamic aspects, d special method in various subjects. The first real chair education, that at the University of Michigan, was likewise tablished under the ægis of utilitarianism, although the scope f its work was immediately broadened so that it was concern- d primarily with the more cultural and theoretical aspects, in rder that its courses might conform the more readily to the standard of true university subjects. The latter tendency, so marked at that time, seems largely to have determined the trend of subsequent efforts within the same field. It is only within recent years that the early utilitarian basis has again become prominent, and we are brought face to face with the problem of practice work. The presence of this problem is doubtless due to two causes: (1) the feeling that the traditional method of work of the normal school in the preparation of elementary teachers would be equally an instrument of good in university work; and (2) the growing conviction that theory without prac- ice implies lack of efficiency.

Despite the widespread though not unanimous conviction that the normal school and the university each has its own

1 Hindsdale, *Study of Education in American Colleges and Universities*. Educational Review, xix., p. 112

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Observation and Practice Teaching
In College and University Departments of Education

by

Frederic Ernest Farrington
State University of Texas

George Drayton Strayer
Teachers' College, Columbia University

Walter Ballou Jacobs
Brown University

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field of work, that the function of the former is the training of elementary teachers, and that of the latter is the training of secondary and higher teachers, and furthermore regardless of the fact that neither one is able to supply the legitimate demand for its own particular product, each one seems to be trenching upon the domain of the other. Thanks to the reprehensible blanket system of certification that prevails in nearly all the states, whereby any certificate carries the right to teach in any grade of school,[1] the normal schools are aspiring to train teachers for secondary schools, and in like fashion, the universities are every year sending their students out into the elementary schools. In fact, more than one normal school is covertly if not openly competing with the universities for this opportunity—a course which must sooner or later give rise to unfortunate hard feeling and invidious recriminations. The root of the whole evil lies in the mistaken notion that the secondary teacher has a higher calling than the elementary teacher. Our American teachers ought so to be imbued with the true spirit of democracy that they would steadfastly reject any attempt to inoculate the great teaching body with the serum of such a professional caste spirit. Surely the builder of the superstructure has no more respectable or responsible task than that of the layer of the foundation. That wise old English schoolmaster, Mulcaster, in contending that the early instruction ought to be under the direction of the best teachers who should likewise be most liberally recompensed for their pains, was merely putting in a little different fashion what Plato had maintained two thousand years earlier, that "in every work the beginning is the most important part, especially in dealing with anything young and tender." [2] The kindergartner has as noble a calling as the college professor; the grade teacher is as worthy of respect as the classical teacher in the high school. The existence of these different classes of teachers is merely a practical recognition that the economic principle of the division of labor applies with equal force to the teaching profession. There are some people that by nature or training are best suited for kindergarten work, others that succeed better with elementary

1 CUBBERLEY, *Certification of Teachers*. Fifth Yearbook, National Society for the Scientific Study of Education. Pt. II. 1906, p. 59.

2 *Republic*, II., p. 377.

school pupils, still others that find best expression of their capacities in handling adolescents.

The colleges and universities have offended, too, in assuming that they can do the work of the normal schools. True their education departments might be so organized that they could discharge this responsibility, but constituted as they are at present, the emphasis is largely on the side of teaching *subjects* rather than on teaching *children*. The normal school that requires a four-year high school course for entrance and is thus free to devote itself largely to the professional side of the elementary school subject-matter has the advantage of the college and university departments of education, as they are constituted at present, in the preparation of teachers for the lower schools. If the elementary schools generally were organized on the departmental plan, some of the disadvantage might be obviated, but at present it is manifestly impossible for the university to give that attention to all the subjects of the elementary school curriculum that is so essential for teachers entering upon that particular field. Our best normal schools spend a relatively small amount of time in taking up new subjects of study *per se*, but they devote themselves primarily to reviewing the elementary branches through the media of those more advanced. It is not so much a more extensive study of the lower subjects that is needed as a more intensive study of those same subjects with a view to teaching them. To the extent that the institutions of higher learning fail to do this—it is by no means to their discredit; they have another function in the intellectual world—to that very extent do they fall behind the normal school in the preparation of elementary teachers. Because all our normal schools are not ideal either in their conditions for entrance or in the character of their work, does not justify the universities in attempting to assume part of these burdens. Each institution has abundant work in its own particular field. Let us rather work together to build up the standard of these lower professional schools until they attain the highest type of efficiency of which they are capable.

The contention often urged that the university students take up elementary work merely as a stepping stone to secondary work later does not justify the practice. It is simply emphasizing the notion that teaching is a kind of jack-of-all-trades

accomplishment, that the appellation "teacher" is a passport to any grade of activity from the kindergarten to the university, and this is all tending to delay the recognition of the teaching career as a real profession. The attitude of the teachers themselves is most helpful toward encouraging the all too prevalent feeling that teaching is an avocation rather than a vocation. In many of our states, young men especially take up teaching as a stepping stone to medicine or the bar. Is there any more reason why teaching should be the handmaid of these other professions rather than that they should perform the same service for her? The argument that if these men were thus excluded the profession would show a still greater preponderance of women teachers, would probably hold true, at least for the present, but is the loss of these particular individuals so much to be deplored? The professional institutions cannot now keep up with the demand. Might they not better devote their time and effort to preparing those that at least enter the profession without the avowed intention of quitting it after a year or two? The world may owe these temporary teachers a living, but it gives them no right to take this at the expense of the helpless boys and girls on whom they try their unpracticed hand. There might be some slight justification for thus practicing upon the youth, if the succeeding classes were to derive any benefit from the sacrifice of their older brothers and sisters, but just about the time these temporary teachers are becoming efficient, they leave their avocation, teaching, to take up their vocation, medicine or law. Then the process is begun anew, and another class of pupils form the subjects to be experimented upon in the educational dispensary. Our school trustees and boards of education have no moral right to expose their children to this form of experimentation, and we college and university men, who are presumably all educational experts, have no right to encourage them in this procedure.

There is one legitimate avenue by which the university is fully justified in sending its men into the elementary field, and that is by providing supervisory and administrative officers. One of the most effective ways of doing this is to take individuals who have already proved their efficiency as teachers, and for such there is no need for the university to provide further practice work. It ought to be a canon of educational administration that nobody is fitted to supervise or direct an educa-

tional system who has not had first hand acquaintance with the work of the rank and file in such a system. The French military academy at Saint-Cyr (corresponding to our West Point) has recently made a most practical application of this principle. Now, the French boy who succeeds in the gruelling competition for entrance is immediately sent out into the army to serve as a private for one year, at the end of that period returning to the academy for his professional training. Only in this way, it is believed, can the future officer properly understand the position and the point of view of the private soldier. The same principle would appear to be applicable with equal force to the training of the educational officers. On the other hand not merely efficient teaching can qualify a person for supervisory or administrative positions in the school system, any more than effective discharge of the private's and petty officer's duties can qualify one for a commission in the army. There are certain other qualities and abilities that are not acquired through mere practice. The ordinary teacher elected to an administrative position is no more fit to plan a course of study than is the corporal to command a regiment. The university in its historical and theoretical courses can and does provide the training which together with the previous practical experience renders one capable of performing the particular task indicated as well as those others that fall to the lot of the school administrative officer.

In view of the foregoing, the problem of the university with reference to the training of teachers would seem to resolve itself into this: in the first place the training of competent supervisory and administrative officers for the lower schools and the general school system; and secondly, the training of the rank and file of the secondary and the higher teachers. As was implied above, it is this second group for whom the university practice work is primarily intended.

II. The Function of Practice Teaching

Dr. Dewey in a paper read before a sister organization a few years ago, opened with these words: "I shall assume without further argument that adequate professional instruction of teachers is not exclusively theoretical, but involves a certain

1 Dewey, *Relation of Theory to Practice.* Third Yearbook of the National Society for the Scientific Study of Education. Pt. I., p. 9.

amount of practical work." [1] Whatever may be the theoretical attitude of the institutions represented in our society toward this question, the present practice today does not seem to justify Dr. Dewey's assumption (for in only eleven of the thirty-seven colleges and universities represented here and reporting does practice teaching form a part of the required work, and only twelve others offer such a course), and one of our members goes so far as to say: "We have no practice teaching whatever (i. e. at our university). We do not think it desirable for secondary training in people of college standing."

What is the function of practice teaching in the professional training of secondary teachers? M. Langlois put the whole question in a nutshell when he said: "One has a right to demand three qualifications in prospective secondary teachers: that they should know what they are to teach; that they should know more than they are to teach; and that they should know how to teach." And a little further on he adds: "It is only in England and in the United States, that the respect of personal liberty has been pushed to the point of charlatanism, to the point of tolerating that anybody at all can teach anything at all." [1] Truly a rather severe arraignment of our teaching staff, but nevertheless I regret to acknowledge a just criticism.

Assume for the moment that these first two conditions have been met. What of the third? Does the keen analysis of even an impartial foreign observer justify us in imposing the practice teaching requirement on our prospective secondary teachers. Let us glance into the outside world of affairs for possible analagous situations. What would we think of a master plumber who attempted to turn out competent workmen by discussing theoretically the relative values of iron and lead pipe under given conditions, by explaining carefully even with practical demonstrations the methods of cutting threads and wiping joints, without giving the learner the chance to try those processes for himself? Would this master workman think of turning over to such a tyro, the responsibility of selecting the material and installing the system of plumbing in a fine modern dwelling? Yet in case of failure the damage could be repaired at a comparatively slight monetary expenditure, and a competent workman could be sent to do the work

1 LANGLOIS, *La preparation professionnelle a l'enseignment secondaire*, p. 101.

properly. Most of our secondary teachers begin their work with no more fitness for their tasks than the plumber's helper. Yet the development of social efficiency in our children is a far more responsible undertaking than installing the sanitary system of a human habitation. In the former case there is no possible way of repairing a botched piece of work.

Turning to the walks of professional life, we find a similar state of affairs prevailing there. It is not so very many years since the young doctor was sent out into the world with his professional equipment derived solely from lecture courses and laboratory work at the medical school. He knew his medical theory and the effect a certain drug ought to have, but it was entirely problematical as to whether he could find a case that exactly fitted into the conditions of his theory, or whether some unexpected contingency might not entirely nullify the ordinary action of the drug in question. Is it any wonder, then, that the country doctor whose skill had been gathered chiefly through common sense, careful observation, and long experience, would be preferred to the young medical school graduate? Now all this earlier preparation of the prospective physician is supplemented by numerous clinics and an extensive hospital experince before the young man begins the actual practice of his profession. Not that the process of learning by trial and error is any less effective than it was before—for the practitioner—but it is attended with less serious consequences for the patients. Is the responsibility involved in dealing with the human mind any less than that in handling the human body? The physician's skill is immediately measurable; he kills or cures in the individual case, and the incident is closed. The effect of the teacher's treatment is far more subtle; its effects are usually discernible only after the lapse of time, when it is too late to repair the injury. The preparation of the teacher without practice is very much akin to that of the doctor without clinics and hospital experience. The idea underlying the change in the preparation for a medical career is most fundamental, and it is psychologically sound: It is considerably more economieal to keep people from making mistakes than it is to correct mistakes after they have been made. The lessons are perhaps more forcibly learned in the latter case, but at what a waste of energy! One has only to recall the recent growth of parental

schools and reformatories with the view of diverting the current that is tending prisonward, in order to find another application of this fundamental truth. This same principle has long obtained wide-spread practical recognition in the educational systems of France and Germany, but it is only beginning to be appreciated in our American schools.

In the other professions like law, ministry, architecture, and engineering, there is not the same public interest in specific practical preparation for the vocation, for failure or "practicing upon the public" entails few or no deleterious effects on society, but merely reacts upon the individual. In law the neophyte gains this practical training in association with older and more experienced members of his profession, or ekes out a precarious existence through the unimportant cases and the court assignments that may fall to his lot. But in neither condition is the public socially interested in his success. It demands good lawyers and it is going to find them, but it is of no particular moment how many poor ones there are. The conditions are quite different in teaching. Not only does the public welfare demand competent teachers, but it is of vital importance to reduce to a minimum the possibility of having poor ones.

In a profession, then, like medicine, where the interest of society in individual excellence is large, and in even other professions like law, architecture, and engineering, where the social good is less intimately bound up with individual success, practical work as a requisite for obtaining university sanction is coming to play a larger and larger part.

In the professional preparation of the teacher practice is not in the least intended to supplant theory but merely to supplement it, to vitalize it, to render it useful, and to give the student some training in applying it. What shall it avail a teacher if he has learned from the history of education that Comenius stood for things, in his sense of the term, as opposed to mere words, and yet find him trying to teach geography, for example, without any reference to the wealth of natural phenomena at his very door? Even Dotheboys Hall did better than that. As Dickens pointedly observes, not only did the poor wretches there learn to spell "window" but they gained intimate knowledge of what a window was by being sent

forthwith to wash one! Wherein is there any practical value in a teacher's being able to discuss intelligently the principle of apperception with the various implications contained therein if he conducts a Latin class with little or no regard for the English roots that are present on every page of Latin text? An understanding of the basic principles of school hygiene and class control is essential for every teacher, but when one finds a class room where the pupils are listless and inattentive largely because the teacher has neglected to employ the means at her command for obtaining a supply of fresh air, is it any wonder that school authorities often look askance at the university trained teacher? The number of like instances might be increased almost indefinitely if the members of our departments of education would only follow the products of their own theoretical courses out into the schools. We have tried to teach students to swim by a thorough drill in the principles of buoyancy and acquatics, but we have refused to give them even a swimming pool where they might try to see if they could prove the worth of these principles, or even where they could see other swimmers at work. The crying need today in our university departments of education is for these "swimming pools."

However desirable it might be theoretically if we could retain these students of education until they had thoroughly mastered the technique of the teaching process, in other words, until they had completed their apprenticeship and were ready to go forth as real master workmen in their profession, in actual practice such a procedure is manifestly unfeasible and impossible. We have neither time, nor accommodations, nor instructing staff for any such task. All we can hope to do is (1) to give them opportunity to see good teaching, and to know it, and furthermore to know why it is good—in other words, to develop in them the ability to project mere processes upon a background of principle in order to estimate their real worth as educational instruments; (2) to enable the students to verify by their own tests the identical principles that they accept theoretically; and (3) to give some facility in handling the processes employed in class room instruction.

The first of these needs no elaboration at this point. It falls more properly within the limits of the paper assigned to Dr. Strayer.

The so-called laboratory aspect of practice teaching fulfils the same function here that it does in any ordinary laboratory science. Not that students are expected to discover new principles of the learning process or school control, but the reworking of the old principles serves to impress them upon the student mind as no amount of theoretical study can possibly do. This second stage which serves to introduce the student gradually to the mechanics of class teaching is divided into several distinct operations:

(1) Observation in a given class room with a view to taking charge of that particular class. This is quite different from general observation, for it includes learning the names of the various pupils, studying the individual differences and the way of approach to each particular child, not so much disclosing the phenomena of the mental processes in general, as providing a source of information to be drawn upon when the student has to handle these pupils himself.

(2) Presence in the class room in the capacity of student assistant, with the idea of making himself useful to the class teacher in any way that offers. Under this head would come, the reading of examination papers, and the correction of compositions and other written work; in laboratory subjects, the preparation and assembling of materials and actual assistance given to pupils in the laboratory; all of which tasks require an ability to weigh, appreciate, and select that is entirely novel to the student who has always approached a subject from the purely academic point of view. Here, too, properly belongs the coaching of individual pupils who have fallen behind through illness or absence, or who need private work.

(3) The preparation of lesson plans. Here one element of the teaching process is isolated from an entangling complex. The student is free from the responsibility of class control; he has abundant time for reflection; and he can give his undivided attention to arranging his material in a psychological order for presentation to the pupils. Then for the first time the student begins to appreciate that the teaching order is not necessarily the logical order, that whereas he has heretofore looked at subject matter objectively, he must now change his point of view and regard it subjectively. It is one thing to master a subject in order to pass an examination upon that subject; it

is quite a different problem to master it so as to call out the proper responses in the learners.

(4) The teaching of a single lesson, one that has been previously worked over as just indicated. At best this must be an unreal sort of procedure. The presence of the critic teacher relieves the student largely if not entirely of the discipline problem, that stumbling block of most young teachers, but by that very fact it allows the student to concentrate his attention upon the presentation of his subject matter.

This gradual approach enables the student to isolate the more important elements of the teaching process, to center his attention upon them singly, and to acquire an adequate comprehension of the problem involved, if not actually to master each individual step, before attempting to combine all into a synthetic whole. It requires only slight reflection to see the advantage from a scientific point of view that such a method enjoys over that which prevails in many of our colleges and universities today of giving, if you please, even a thorough theoretical equipment, and then casting the student bodily into the school room with the implied counsel, "We have done all we can for you. You have your basis of knowledge; there is the school; go ahead and make your own adjustments."

This analysis that we have just outlined possesses the twofold advantage of guiding the student when he has most need of such assistance, and of protecting the children from the flounderings of the tyro. The first implies no coddling process, for under intelligent administration, the student must take each of these steps for himself, but it enables him to do this under an economical, ideational process rather than by the longer and more wasteful empirical procedure. It necessitates real teaching, and makes practical application of a principle that has already been suggested, "It is distinctly more pedagogical to prevent the student from making mistakes than to correct them after they are made." The second consideration has not yet been sufficiently appreciated in our educational procedure. This idea of shielding the pupils from the practice teacher may be justified as a measure of self-protection in a big private school like the Horace Mann School at Teachers College, New York, (where many of the tuition fees are considerably greater than those at any of the colleges or universities in the country,

and where the parents are paying these large fees in consideration of having none but the very best teaching available), but the same conditions do not prevail in our state universities. It is an undebatable fact that the first teaching of every teacher is practice teaching, whether so denominated or not, whether done in a particular school under the control and supervision of educational experts, or in a remote district high shcool where any close supervision is conspicuous by its absence. If the university educational departments do not assume the responsibility for this first teaching, and it is thereby forced out into the far corners of the state, is there not unjust discrimination against the modest country school, which if anything is less able to recover from the poorly qualified individual teacher? The State High School, University High School, or whatever may be its appellation, with its superior equipment, its skilled critic teachers, all under the personal supervision of an educational specialist, even when a part of the teaching is in the hands of young and inexperienced teachers, will provide a training for the youth that will compare more than favorably with the best ordinary high schools in the state, and it will enjoy the public confidence. Furthermore, such preliminary work *before* the certificate is granted will serve as a sieve through which to sift out the undesirables and the incompetents who ought never to be allowed to enter the profession. Such should be firmly told that they would better seek some other field of activity than teaching.

Finally comes the synthesizing process of all the professional preparation, the actual teaching under as nearly normal conditions as possible. Then the student who has passed successfully through all the various preliminary processes, which, by the way, should be eliminatory at each stage, is put in charge of the class for a period of time, thus reproducing in miniature as nearly as possible the actual conditions of one's teaching experience. The critic still remains near enough to be called upon in case of need, but the supervision is much less close. Then for the first time the student teacher assumes the full burden of class room conduct—teaching, discipline, and all—and he begins to play a part in the educative process in the complete sense of the term, to teach with the consciousness that he is responsible for the intellectual, moral, and dynamic growth

of the pupils entrusted to his care. Practically the only real condition of actual teaching experience that is not present here is the feeling that the teacher must somehow "make a go" of it. It is indeed questionable how really valuable this condition may be. True, it does spur on some teachers to success, but the large amount of vital energy used up through the wear and tear on the nervous system might better have been expended in some other way. It is not to be expected even at the end of this last stage of the student teacher's professional preparation, that he will have reduced all his class room activities to automatic reactions, so to speak, that he will have become a past master in the art of school management, but it is to be expected that he shall have acquired some real appreciation of the teacher's problem, that he shall have had some practice in projecting processes upon the background of principles, and that he shall have made a fair beginning. The perfection of these processes can only be attained by experience and use, and if we teachers of teachers have done our work faithfully, this growth will continue as long as our students continue to practice the profession.

III. What Has Been Done

This problem of secondary practice teaching is by no means new, however novel its discussion in the United States. When we look at the conditions abroad, we begin to appreciate how far behind we really are. It seems hard to realize that as far back as 1826,[1] even before there were any definite plans for the establishment of an elementary normal school in this country, Prussia began to require the *Probejahr* or year of trial teaching of all candidates for appointment in the secondary schools. In 1890, partly from the fact that the number of men preparing for teaching in these schools had grown so embarrassingly large, and partly from a desire to increase the professional requirements, still another year called the seminar year was inserted before the *Probejahr*. This succeeded in reducing the number of candidates for teaching honors, and henceforth it formed a part of the professional preparation for the secondary service. Here, then, are two years of practical work (following the three years of academic study in the university, and one year of private preparation for the state examination), th

1 Russell, *German Higher Schools*, p. 363.

former devoted largely to what has previously been denominated the laboratory aspect of the practice work, and the latter to a year of real practice teaching, six or eight hours per week.

The significant points for us to notice here are: first, the amount of preparation for the teaching profession after the work of the *Gymnasium* is completed (this carries the pupil considerably farther than even our best high schools),—three or four years in the university, one in preparing for the state examination, one in the seminar, and one in the trial teaching, all of this going a long way toward building up a good wholesome conviction that teaching is as real and as worthy a profession as law, medicine, or theology; and second the fact that the practical side of this professional training is given outside the universities and in institutions beyond their control, partly in regular seminaries established for that purpose, and partly in certain selected secondary schools. The extremely centralized character of the German educational system and the very high professional attainments of the secondary principals and teachers are contributory factors in the success of this latter kind of training. The degree of centralization that prevails in Germany would be quite out of the question with us, nor would it be desirable, but satisfactory substitutes are perhaps within the bounds of possibility. Although the perfection of the German system is beyond our reach at the present, yet I believe one or more teachers capable of doing a part of this work could be found within a reasonable distance of practically every one of the institutions represented in this society.

In Germany, the number assigned in any year to any one of these "preferred" schools is small, from three to seven at the most. Notwithstanding that there is regular theoretical work once a week under the leadership of the director, the chief purpose of the year is to acquaint the students with the practical working of a secondary school. Throughout this period they are required to attend all faculty meetings, and they are given practical training in school control, the conduct of examinations, and in the use of apparatus, material, and other accessories. The first quarter is spent almost entirely in observation, while the subsequent class room practice includes two or three lessons per week, taught under the eye of the director or some other of the regular teachers, together with certain set lessons which are

conducted in the presence of all the students assigned to the school and which form the basis of extended criticism from the director. It should be observed here that by this time every student knows what subjects he intends to teach, in fact, these have all been determined by the result of his state examination. He teaches these *and no others.*

The *Probejahr* is passed in much the same fashion, save that it is even more practical in its experience. The students are sent by twos to certain designated schools, and there they teach six or eight hours per week under the oversight of skilled teachers.

In comparison with these two years of practical work, the amount that we devote to a like purpose seems paltry indeed. The German principle, "Make haste slowly," finds no counterpart in the feverish anxiety to rush our students through the mill at top speed. Germany is still quite content with the hand work, while America seems to prefer the factory, machine-made product, even in the educational field.

In France, despite the growing part taken by the provincial universities in the preparation of secondary teachers, the Higher Normal School at Paris still retains much of its former prestige. This school, which in its permanent form antedated the first of the above-mentioned German seminaries by nearly a score of years, was for a considerable period nothing more than a university of a specialized type, fortunate enough to have a selected group of students to work with. Since the reform in secondary education in 1902, the instruction has been taking on a more and more pronounced professional character. For years the scholarship side had been developed so intensely that its graduates were quite as competent to undertake real university teaching as to enter the secondary service. A strong reaction is going on there at this very moment, tending to provide a professional preparation, commensurate with the academic, which latter has at no time been questioned.

The "practice" of the normal student which is confined to the third and last year of the course, is of two sorts: in the first place, lessons presented to the student's class-mates of the normal school; and in the second place, actual teaching in the city *lycees.* The drawbacks of the former will be at once apparent, but this disadvantage is not so great as might be expected, for,

after all, these lessons do not differ materially from the lecture and quiz method generally employed in the secondary schools. The work is so arranged that during the year each student will have to conduct from three to twelve lessons in each subject which he is preparing to teach. The presentation is subsequently criticized by his fellows and finally by the professor in charge. Inasmuch as each professor is absolutely free to carry on his course as he sees fit, and he has been chosen for his work without any regard to his ability to train up others, it is evident that the practical value of the criticisms from the teaching point of view will depend entirely upon the individual. Some of these cirticisms are based upon a fine appreciation of the needs and capacities of the secondary school boy, while on the other hand, some, however searching and keen they may be, are exactly the sort one might expect to hear passed on a public lecture delivered before a mature audience.

The second sort of practice, the actual teaching in the city *lycees*, has lately taken on new life. Formerly a two weeks' task, disagreeable to the normal student, looked upon as an imposition by the *lycee* teacher, and often treated as a lark by the pupils, this practice period is now reduced to serious work. The best that can be said, however, is that it is done under competent teachers. In the modern languages the practice teaching is considerably more extensive. The three weeks for the ordinary subjects are expanded so that the period covers nearly two-thirds of the academic year, the best of the *lycee* teachers are selected for this purpose, and they are paid four hunrded francs per year extra for their services. This plan for the modern language teachers is yet in the experimental stage. If it succeeds it will probably be extended, at least in some measure, to the other subjects. The great weaknesses here, however, are, in the first case, the unreality of the practice, and in both cases, the chasm existing between theory and practice, for there is no one person in whom the responsibility for this work can be centered.

The problem in our own training institutions is widely different from that which one meets abroad, the mere numbers involved being of immense significance. The enrollment in the three classes at the Higher Normal School in Paris, for instance, is only slightly in excess of one hundred and fifty, whereas, in

the University of Texas alone, the number of students in the education department is upwards of two hundred and fifty. Yet the former is nominally the training school for all the *lycees* in France with its thirty-eight millions of population, while the latter serves in its own way but a single state. The traditional social conditions which apply with equal force to Germany and France account largely for this striking difference in the mere numerical nature of the problem in the new and the old world. The fact, too, that abroad, education is a national responsibility rather than a state or local question as here, makes possible the high degree of centralization that prevails on the continent with its consequent ease of control. With each of the American states the sole arbiter of its educational affairs, there is naturally no uniformity of procedure.

In order to find out what is being done at the present time in the United States, a series of questions was sent out to all the institutions represented in the membership of this society, all the state universities and some six other colleges and universities added for various reasons, in all amounting to sixty-nine institutions.

The following table, which includes only those institutions replying to the questionnaire, will show some of the more important details of the facilities and conditions of the practice course. With few exceptions, one may fairly assume that in the other institutions no such opportunities are available.

The following comments will throw additional light on the categorical answers given above.

Adelphi College. The practice teaching, evidently of a sporadic nature, is done in the preparatory department, but this school is used more for demonstration than for practice purposes. The tuition fees, $60 to $180 per year, partially account for this. "At present there are so many who wish license number 1 that we cannot give practice in elementary teaching. We still give occasional practice work in high school subjects." This training may not be taken until the senior year.

University of Arkansas. The University Normal School requires daily teaching during the fourth year of the course, which corresponds to the university sophomore class.

Brown University has a remarkably effective arrangement

for practice teaching. The working agreement which has been in force for several years has now received formal official sanction in a contract entered into June, 1908, between the School Committee of Providence, and the university authorities. By the terms of this contract the university is enabled to use the city high schools for practice work in consideration of an honorarium paid the teacher to whom the student is assigned. In return the city has an assured source of supply for high school teachers and is able to apply a probation test that is fair to the candidate and an effective safeguard for the city. The double authority is unified in the person of the professor of theory and practice at the university who is likewise director of the training department in the Providence high schools. The teaching is carried on simultaneously with the university work, the director meeting the students for regular instruction and visiting them frequently during their class work. The director arranges their assignments in conference with the high school principals, and in case of marked inefficiency in either scholarship or discipline, he initiates the movement for their dismissal.

The director, too, nominates the supervising teachers from among the regular staff, the actual appointment being made by the Committee on High Schools. In return for the supervision of the student teachers assigned to their charge, these supervisors receive fifty dollars per year if the student is of the first type, and in any case they are entitled to attend courses in the education department without fee, but such free course, in accordance with this provision, may not count toward a degree.

These student teachers, of whatever grade, must hold the degree of Bachelor of Arts or Bachelor of Pedagogy from some reputable college. They must be acceptable alike to the superintendent and to the professor of education. They must pursue at the same time a certain schedule of courses at the university, which may be counted toward the Master's degree, if they so elect. Successful completion of the teaching and the university work carries with it the teacher's diploma from the university and likewise entitles the student to preferential consideration from the school board when regular appointments are made to the teaching staff.

The student teachers of the first type already referred to (not less than four in number, and ordinarily divided equally

between the sexes), are appointed by the Committee on High Schools from a list of candidates who fulfil the required conditions. They receive a uniform salary of four hundred dollars per year, and in everything except the amount of work they are required to perform (ordinarily limited to fifteen hours per week), they are subject to the same rules as other teachers.

Student teachers of the second type are held to the same qualifications, duties, and responsibilities as those of the first type save that they receive no compensation for their services, they are appointed by the professor of education, subject to confirmation by the High School Committee, and the minimum amount of work required of them is one hundred twenty-five hours of observation, individual instruction, and class teaching. These students are expected to "render proper assistance" to the class teachers in return for the supervision they receive.

Although this contract applies only to the high schools, the same practical privileges for observation and teaching in the grammar schools are available for a limited number of seniors who are taking the course in education.

California still holds the very front rank in state requirements for high school teachers. Practice teaching is prescribed, at least four semester hours, with graduate status a prerequisite for admission. The regulation of the State Board of Education which required that after July, 1906, this be done in a "well-equipped training school of secondary grade directed by the department of education" was considerably emasculated two years later by a provision that accepted as an equivalent, practice teaching done in a grammar school in connection with one of the state normal schools. This retrograde step was taken only after the state university had practically made the regulation a dead letter by failing to make any provision for such a secondary school. The University of California still continues its practice teaching in the local elementary and high schools, while Stanford makes use of the adjacent schools of Palo Alto, and the not distant state normal school at San Jose.

The College for Teachers of the University of Cincinnati presents a rather unique situation in that, although nominally training for both elementary and secondary school positions, and with a differentiated program of work, as a matter of fact its graduates enter the elementary field exclusively. "Our

entire problem in Cincinnati is, primarily, the preparation of the elementary school teacher. We have so many college graduates in the grades who have specialized in the various high school subjects, that practically all appointments to high school positions are made from the grades."

In addition to the regular practice teaching course, immediately after graduation, the students enter upon a two months' period of so-called "cadetting" in order to secure positions upon the city's preferred eligible list. They are still under the direction of the department of education and in the course of this period they acquire a most practical knowledge of the teacher's problems, for during one day in each week they are left alone in charge of the class. Furthermore, for the first year after appointment in the city schools, the department of elementary education keeps close watch over them, aiding with suggestion, and even sending a cadet for a day or two to relieve the teacher for the purpose of observation.

Though with no real authority over the schools, the department is rendering valuable service to the city schools, and in return has the necessary field of work for observation and practice put as its disposal. The whole arrangement must result in an unusually high academic standard for the elementary teacher in Cincinnati.

Colorado College, although neither requiring practice teaching for its recommendation, nor even offering a course in the subject, has affiliations with the Colorado Springs High School for substitute work and with a local private school for extra classes. It also enjoys privileges for "cadet and substitute teaching in the grades of the city schools." Furthermore some little practice teaching is done in connection with the courses in genetic psychology, the history of education, and the principles of education. The courses are open to either juniors or seniors.

The University of Colorado has adopted into its faculty, so to speak, the principal of the Boulder High School, and the principal of one of the elementary schools, the former as instructor in secondary and the latter as instructor in elementary education. Practice teaching is given in both schools. "This vexed problem of all training institutions has been quite satisfactorily solved here by a very simple device. This device consists in breaking up the larger classes in the public schools in Boulder

into sections and putting one of the sections in charge of the student teacher, he being under the immediate supervision of the regular class teacher, the school principal, and some one from the College of Education, and under the general supervision of the head of that institution. The section of the class taken by the student teacher is as a rule the smaller section and is composed of those who have had difficulty in getting on—of those who, except for this arrangement, would be likely to fail of passing. Each student in such a section is to some extent a subject for special study and treatment, hence the novice teacher's attention is at once forced where it properly should be, upon *the problem of how children learn rather than upon how teachers should teach.*

"Each such section is a problem, and a set of problems, to be solved by the persons mentioned working together. The student teacher observes the work of the regular class (in which his section frequently recites), sees what the ideal for the day's lesson is and then, when he meets his section, does what he can to attain that ideal. In this attempt he is helped by the supervisor. This sort of thing repeated each day rapidly brings the novice teacher to efficiency..... We manage to save the Boulder schools many who would otherwise drop out."

This scheme has been in operation only since January, 1908. The final sentence above seems to be its justification in the eyes of the school board. It pays its own way, as it were.

Teachers College, Columbia, has a requirement for practice teaching, only in the case of those who have not previously taught. This varies between two and forty periods, but for reasons already indicated it is practically restricted to the elementary school, even for those looking forward to secondary work. Junior, senior, or graduate standing is demanded for admission to the course.

George Washington University requires practice teaching for its teacher's diploma, using the seventh and eighth grades of the Washington public schools for that purpose. One student was enrolled in 1907–1908.

The education department of Harvard University demands no practice teaching from the students, but from the fact that it recommends men who have not done practice teaching at that university only when they are known to have had equiva-

lent experience elsewhere, there is some pressure being brought to bear even there. Furthermore, up to the beginning of the present academic year, the work was entirely voluntary, whereas now it counts toward a degree. The first half year the course deals with school administration and management, secondary education, and observation, while during the second half, the course "is conducted in neighboring institutions." The adjacent communities of Cambridge, Newton, Medford, and Brookline, offer facilities for practice teaching in the seventh, eighth, and ninth grammar grades, and throughout the high school. The conditions are as real as possible, for the student is given complete charge of the class for a half year and is held responsible for its success. The work is supervised largely by the department, although the regular class teachers render effective coöperation. In return for these opportunities, Harvard offers a free course in any department of the university to one teacher for each student thus favored by the schools. The course is open to seniors and graduates.

At the University of Illinois, the Academy is used as a field for observation and practice teaching, the work being under the control of the department of education, while the school itself is a separate organization. The department is furthermore responsible for the work of its student teachers, although members of other departments,—the class teachers, and the supervisory officers—assist in an advisory capacity. The practice work formerly done in the schools of Champaign and Urbana has evidently been discontinued. Senior standing is required for admission.

Indiana University offers an elective course for practice teaching in the secondary school only, the high school of Bloomington providing the field of work. The high school teachers are the regularly appointed critic teachers, the university supplementing the ordinary salary of each by two hundred and fifty or three hundred dollars per year, in return for the consulting power it exercises in the appointment of these teachers, and for their services with the university students. They give special methods courses in the high school subjects, are consequently members of the school of education, and have direct charge of all the practice teaching. They require lesson plans, conduct special conferences, and do most of the critic work,

although the general direction is centered in the person of one of the professors of the department. The practice teaching extends over a trimester, and requires senior standing for admission.

"At the University of Kansas, the departments of mathematics, modern languages, and Latin, in coöperation with the department of education, offer courses in method which involve some practice teaching. Furthermore, the university students are sometimes assigned a class in the Lawrence High School for a semester, receiving some credit in the appropriate college courses." No one below senior standing is entrusted with this work, and the supervision is mainly performed by the department.

Lehigh University is carrying on an interesting experiment in practice teaching. There is a practice school under the control of the department, started in October, 1907, with the professor of education at the head, and five "regularly employed" teachers. Junior standing is requisite for admission to the course, and each student teaches one period per week for twenty weeks. Best of all, the school is self-supporting, with thirty pupils, and fees of twenty-five cents per month per pupil. "The practice school is a night school attended by men and boys who work during the day, some of whom are preparing to enter college, and some simply desire to follow elementary studies. It meets in the university buildings, and there are practically no expenses."

McGill University will start a course in practice teaching in January, 1909. The department is to have the use of "a model school under the control of the Protestant Commissioners," provision being made for fifty half days of work for each student. The course is open to students of third year standing.

The Massachusetts Agricultural College at Amherst, which is engaging in the training of teachers of agriculture for the secondary schools, has a scheme that is a little out of the ordinary, although it does not differ in principle from the affiliation that has existed for several years between Stanford and the San José Normal School. As yet no practice course is offered at the college, but there is "an arrangement with one of the state normal schools, whereby a member of the faculty spends a part of the year at that school giving instruction in agriculture, school

gardens, etc., as well as directing the work of the model school teachers in some phases of nature work..... As yet there has been no interchange of pupils from one school to the other," but it is hoped to bring this to pass.

The University of Minnesota has had a regularly organized practice school since December, 1907. Only the seventh, eighth, and ninth grades are now in operation, but the college is looking forward toward a complete high school organization, with some upper grade work for observation by prospective principals. Senior standing is required for admission to the practice course, and the teaching covers a period of eight or sixteen weeks. There are no relations with the public schools, the observation work that was formerly done in the schools of Minneapolis and St. Paul having been given up just previous to the opening of the university practice school.

The University of Mississippi imposes practice teaching (open to seniors) as a requirement for its teacher's recommendation, but this is evidently not very far reaching, for "only a few students take a degree in education. Those who have had no experience do a little practice work in Oxford High School, under the supervision of the instructor and the high school principal." The university campus school was given up on account of a dearth of children.

The University of Missouri has perhaps the most efficiently organized practice school of secondary grade in the country. Starting very modestly in 1904, it has grown rapidly, and this year has enrolled two hundred and twenty-five pupils. The twenty dollar tuition fee from each thus provides an appreciable amount toward paying the running expenses. Practice teaching is required for the teacher's certificate, and only seniors are admitted to the course. The work covers the entire year of thirty-five weeks, with three periods per week. All the supervision is under the direct charge of the professor of theory and practice, but he is aided by an assistant professor in the same field, various professors of the academic subjects, and three special assistants in the high school. The principal and the lady assistant principal compose two of these last, so it is evident that the bulk of the teaching is in the hands of the practice students. The good will of the other high schools of the state is largely guaranteed by a wise provision with regard to

the admission of pupils. "The Teacher's College High School admits only those who have exhausted school opportunities at home. Students from accredited high schools will not be admitted." Students entering the university with conditions may enroll in the school, upon payment of the regular tuition fees less the five dollars entrance fee already paid to the university.

The University of Nebraska has a model school, started in 1908, which supplements the rather uncertain opportunities for practice teaching already enjoyed for several years in the local public schools, both elementary and secondary. The new school enrolls this year seventy pupils who pay ten dollars tuition per semester. As yet only the ninth and tenth grades are represented. In some respects this resembles the plan of Missouri, but here the number of regular teachers is greater, five as opposed to three in the neighboring state, the supervision is entirely in the hands of the department, although the teachers in the public schools (where these are used) may offer criticisms, and only eighteen weeks of two periods per week are required in the practice course as against a full year at Missouri. Senior standing is necessary for entrance. Since the establishment of the Teacher's College in September, 1908, the requirement for admission has been freshman standing. Although the student may then take up any work that is offered in the college, he is advised to defer the practice teaching until the senior year, and except in special cases does so. Conditions at Nebraska are in a state of flux, with the prospects of a return to the former requirements of junior standing for admission to the work in education.

The University of North Dakota is in process of transferring the former preparatory department to the Teacher's College and of transforming it into a model school. Thus while practice teaching is neither required nor offered, yet, "within the other courses, opportunity is given for some practice work in this partially established model school."

Ohio State University requires practice teaching for its teacher's recommendation, using the Columbus high schools for that purpose. The course is open to seniors and graduates, with the members of the education department doing all the supervision. Definite plans are on foot looking toward the establishment of a high school at state expense for one of the city districts,

but it is intended to use this only as a model and observation school, and to continue the practice work in the other schools as heretofore.

The University of Oregon is requiring practice teaching for the teacher's recommendation this year for the first time. The local high school offers facilities for this purpose, although next year a small high school in an adjoining town will also be available. The members of the department of education do substantially all the supervision; the practice work continues eighteen weeks of five periods each; and senior or graduate standing is requisite for admission to the course.

The University of Rochester utilizes the city high school by arrangement with the school authorities. Senior standing is required for admission to the course, and the principal and class teachers share in the supervision.

The University of South Dakota is this year using its newly organized practice school for prospective secondary teachers, but continues its "affiliations" with the city schools (the first two grades only) for elementary work. The supervisory duties are divided between the department and the class teachers. The training for the elementary and the secondary teachers is widely differentiated, even the prerequisites for the practice course being absolutely separate. In the former case, the course is open to freshmen, while in the latter at least junior standing is necessary.

The University of Texas is offering an elective course in practice teaching this year for the first time, but it is proposed to make this compulsory hereafter. The local schools will furnish the field for the present. The course covers two trimesters, but the actual practice will net approximately one-half the college year with three to five periods per week.

The University of Washington uses all grades of the Seattle public schools for its practice work. Junior standing is required for admission, and the course continues for nineteen weeks with two periods of teaching per week. The supervision is shared about equally by the university department and the teachers in the public schools. Negotiations are pending looking toward the establishment of "permanent relations" between the university and the city schools, but the details of this arrangement have not yet been made public.

Wellesley College does not yet provide a course in practice teaching because the force of the education department is not sufficiently large to arrange for the work. The college already has the privilege, however, of practice teaching for graduate students in one of the local schools whenever it is desirable to utilize this opportunity.

West Virginia University offered no practice teaching in 1907–1908. This year the Morgantown public schools, from the fourth grade up through the high school, are being utilized for observation and practice. The actual teaching, preceded by three months of observation, covers six months time of one period per week. "Both observation and practice work are under close supervision, the regular teacher, the university professor in charge of the work, and the class in training being present at each exercise, and each one is carefully prepared for by all present." None but seniors and graduates are admitted to the course, and all the supervision is in the hands of the department of education.

William and Mary College requires practice teaching for its teacher's recommendation. The work is taken in the fourth year of the teacher's course, which is here equivalent to sophomore collegiate standing. The kindergarten and four grades of the public schools provide the field for the practice work at the present time, but the latter will soon be reorganized and will absorb all grades of the town school from the kindergarten through the high school. The teaching covers a period of ten weeks, five days per week, the immediate charge of the supervision being in the hands of the principals, under the general direction of the professor of education.

The department of education at the University of Wisconsin offers no practice teaching, although such a course is given in the German department. Experiments are being made here and in the English department in requiring members of the teacher's course to teach classes of freshmen and sub-freshmen. The affiliations that exist between the university and the city schools apply to the high schools and certain of the elementary, but for purposes of observation merely.

The Normal Training School of the University of Wyoming, which prepares only for elementary teaching, has a small practice school of thirty pupils. Practice teaching is compul-

sory. "Complete preparation corresponding to a high school course of four full years' work, together with one year of normal work," constitutes the prerequisite in academic courses. The supervision is performed exclusively by the members of the department.

IV. Application to Present Conditions

There seems to be a reasonable agreement among the twenty-nine colleges and universities reporting as offering practice teaching as to what should be required for entering such a course.

The most frequent prerequisites are:

Psychology	18 institutions.
Educational psychology	19 "
History of education	17 "
Principles of education	15 "
Observation	11 "

No other subject is required in more than seven institutions. If the psychology and the educational psychology be grouped, every department except Harvard, Stanford, McGill, and Nebraska demands a previous course in psychology of its practice students. Either the history or the principles of education are demanded by all but Adelphi, Colorado College, Columbia, Harvard, Stanford, Nebraska, and the University of Washington, while eight institutions require both these subjects. The field supplied by history and principles of education would appear decidedly broader than that covered by both the general and the educational psychology. In other words, looking at this question from the point of view of the bearing of these subjects upon the immediate and the future teaching of the student, the scope of the educational psychology might be somewhat broadened, if necessary, and the general psychology given up altogether.

The most evident shortcomings in the present prerequisites are the lack of a course in secondary education, and one or more special methods courses in the subject or subjects the student expects to teach. California, University of Colorado, Harvard, Mississippi, Ohio State, and South Dakota, are the only institutions reporting a definite requirement in secondary education as a prerequisite for the practice work. The child of eleven is the

child of seven, only four years older. The individual of fifteen is not the eleven year old with merely four years added. He is a changed being, for a new life has opened before him, new forces are at work within him that were dormant before, and he looks at the world from a different point of view. Not only are there new physical and mental conditions, but these new conditions demand new methods of treatment. These significant changes can be brought out nowhere so readily as in the course which treats the general subject of secondary education. Besides, too, the peculiar conditions surrounding the secondary schools of the particular state may here be treated in detail.

The fact that Illinois and Missouri are the only institutions reporting a special method course as a prerequisite for the practice teaching may perhaps be explicable on the ground that the questionnaire failed specifically to mention such a course in a rather long suggested list. Yet this touches one of the most fundamental weaknesses of the practice students today. Such is the lack of interrelation between the departments that in only nine of the reporting institutions does the education department unequivocally demand the recommendation of the other departments before admitting students to the practice course, although one other reports that "the advice of professors of the academic subject is usually accepted." Another university depends upon "intimate knowledge of the students" in the earlier work in the department, together with their academic record. Still another "refuses to admit students to the course who are not fitted to become teachers," but there is no indication of the standard of judgment involved. There is a crying need in most of our training institutions for substantial courses in the various subjects. Whether they are called special method courses or not is immaterial. In fact the name "teacher's course" might be rather preferrable. At least this would avoid the use of a much abused and somewhat distasteful title. Many of the so-called teacher's courses devote themselves more to an extensive study of the subject in question than to an intensive study that shall pay particular attention to the possibilities of that subject in the secondary schools, discussing the various texts, the selection and arrangement of material, and, furthermore, including a thorough going review of the subject matter that the students will be called upon to use.

This weakness in subject-matter, particularly in the languages, was one of the greatest stumbling blocks with which the writer had to contend at the University of California. Although in the main, the students had good academic records and were doing at least acceptable work in their graduate courses, yet they were not sure of themselves in the very elementary facts of the subjects they were attempting to teach, Latin grammar, Greek syntax, German gender, etc. The properly conducted teacher's course should lay bare the student's shortcomings and strengthen him in these weaknesses. The other failing which seems to be common to the non-linguistic subjects is lack of appreciation of relative values. In other words, the work of the student teacher lacks perspective; it is all confined to a single plane. Just as the infant fails to touch the objects for which he reaches, because he sees them all in the same vertical plane, so the young teacher fails to attain the object sought because he neglects the fact that teaching is a three dimension art, so to speak. It is absolutely essential that he pay attention to the light and shade, that some things should stand out in high relief, while others should drop back into comparative insignificance. The student looks at the presentation of a subject in much the same way that the layman views a drawing. He sees only the result, but he is not conscious of the way in which this result has been attained, nor could he reproduce the same effect. As well expect the student to understand the teaching possibilities of a subject from merely approaching it from the learner's point of view. The responsibility for giving the appreciation of the relative values in a particular subject thus belongs to the specialist in that subject, for he certainly understands the possibilities of his own field far better than the educational expert. The application of all this to class room practice, on the other hand, involves something beyond the mere psychological analysis. Herein lies the function of the education department. The development of the subject matter side in its practical aspects is one of the salient characteristics of the teacher's preparation in both the French and German systems, and is of considerable significance in accounting for the superiority of their teachers' preparation. After such a teacher's course as the one briefly outlined, the department would be in position to say that in its own judgment the student was quali-

fied from the subject-matter point of view to begin the study of the technique of teaching. Responsibility for subject-matter I conceive to be no part of the function of the professor of the practice of teaching.

The irreducible minimum for entrance to the secondary practice teaching course, then, would appear to be: (1) psychology, preferably educational psychology; (2) principles of education; (3) secondary education; (4) a teacher's course in as many different subjects as the student expects to teach.

The principles of school hygiene, school administration, and school management, in so far as they are essential for the ordinary teacher may readily be handled in connection with the practice course itself.

The time is rapidly approaching for us to discard the pernicious system of blanket licenses whereby the individual who is perhaps qualified to teach Latin is, under the terms of his professional sanction, led to believe he is competent to teach English, French, history, or any other subject he has ever studied, and even others in which he has scarcely opened a book. There was a time when there was such an individual as *the* engineer. Now we have civil engineers, mechanical engineers, mining engineers, and the list is still growing. The application to teaching is sufficiently obvious. The exigencies of present conditions do not justify a rigorous extension of this principle to the teaching profession today, but are education departments doing all they can to hasten the time when such application can be made?

From the reports given above, it is patent that there is no typical plan, nor even any concensus of opinion as to how the practice work should be given, whether in a school under the control of the department, in the public schools, or in a combination of them both. William and Mary, and Nebraska are the only places where the last named plan is in vogue,[1] and the former is even now about to take over the town schools. Of the twelve institutions that have a practice school under the department of education, at only Illinois and Missouri are the schools fully organized and offering complete opportunities for practice.[1] Adelphi and Columbia are compelled to restrict

1 South Dakota uses its own school for secondary teachers, and the first and second grades of the local schools for elementary teachers.

the practice work on account of high tuition fees; Lehigh's school is of a special type that does not admit of any general application; the schools at Minnesota, Nebraska, North Dakota, South Dakota, and William and Mary, and Wyoming are yet only partially organized. The other eighteen institutions where practice teaching is offered make use of the local schools, sometimes merely on sufferance as at California, Rochester, and others; sometimes by adopting the city principals and teachers and making them members of the education department, as at Colorado and Indiana; and sometimes by formal contract between the university and the board of education as at Brown. The very considerable tuition fees there and at Harvard make it possible to give a *quid pro quo* to the teachers for their services, at no actual financial cost to the institutions in question, an arrangement that would be quite unavailing at the state universities. In certain respects, the scheme as applied at Brown seems to present most advantageous conditions, opportunities which are but little short of those enjoyed by the University of Cincinnati in the preparation of elementary teachers. But the number of students that may be provided for at Brown is decidedly limited; it has been said not more than a third of the class, a limitation that would be fatal to its consideration by a state university. The plan followed by Harvard, also has certain peculiar advantages, for the "opportunities for observation and practice teaching in that metropolitan community (Boston and its suburbs) are so good that no 'practice school' could offer comparable opportunities." Although all the schools that are utilized for practice purposes are within a half hour of the university, the problem of any close supervision by the department would seem to be rather serious. Certainly it would be so if any considerable number of students were taking the course.

In the long run, the only really satisfactory plan will be for each institution that is actively engaged in the training of teachers to have its own practice school. Without such a school there is no unified control of either curriculum or teaching force, and the head of the practice work will be continually hampered by the lack of freedom when he must add to his other troubles responsibility to a public school board, and the necessity of working in harmony with nearly as many different public school teachers as he has practice students. Under such

conditions what opportunity is there for any unity of purpose or method? The plan of forming classes of conditioned freshmen has some advantages as a makeshift device, but it allows no organized school, and the problems of satisfactory supervision are almost insurmountable. The plan of holding elective and modern language classes for the upper grammar grades outside the regular school hours also has something in its favor, but it is open to both the former objections.

The University of Missouri has demonstrated conclusively that it is possible to establish a secondary school for training purposes even in a small city, and to bring in therefrom a considerable revenue toward its running expenses through tuition fees. This sum might be still further supplemented by laboratory fees from the student teachers. Practice teaching is as much a laboratory subject as physics, chemistry, or engineering, and the material with which it deals is certainly far more valuable. The ordinary laboratory fee is expected to pay the running expenses of the laboratory. The education department would seem justified in charging as high a fee as that demanded by any other ordinary department of the university.

It would probably be impossible for even the most fortunately situated of our educational departments to provide practice teaching for more than fifty students per semester, or one hundred for the year, provided the course was limited to a half year. Assuming the annual displacement of teachers to be fifteen per cent,[1] this would recruit a teaching force of six hundred and fifty or seven hundred, a number large enough to supply the accredited high schools in the great majority of our states. It has been argued that the state university in a small city could not provide adequate practice teaching for one hundred and fifty students per year. If this is true, as it probably is, why should not the practice course be closed when the enrollment has reached the number that can be provided for? Knowing the possibility of such a demand, the department of education would be in position to apply some selective test. Laboratory courses in our state universities have been closed to further registration before now when the resources of the department

1 HOLMES, *The present provision for the education and training of secondary teachers in the United States*, in Fourth Yearbook of the National Society for the Scientific Study of Education, p. 63.

have been taxed to their utmost. Such a proceeding is by no means looked upon as un-American, nor as exposing the department to any unjust criticism. The education department thus has sufficient precedent for following a similar procedure, until it can expand its facilities to keep pace with the growing demand.

Furthermore, the home resources of the universities might be eked out within two or three years by an application of the German *Probejahr* system in a somewhat modified form. There are three evident objections to such a plan: first, it implies a fifth year of college work, and few if any of our states are in position to demand this extra expenditure of time and money; second, the teaching force in the high schools is hardly competent to undertake this responsibility; and third, the local objections against having the children "practiced upon" would be too strong.

In the first place, cut the year in half and let it be a *Probesemester*. With the rapid extension of the elective system or its modified form the group system, it is reasonably possible for the brightest students to complete the college course in three and one-half years, and with a little incentive, more of them could do so without detriment to their work. Arrange their work in such fashion that all the requirements for their degree except the practice teaching course shall have been fulfilled by the middle of their senior year. Their other education courses ought to be out of the way by that time anyway, a very simple arrangement if the psychology were begun by the middle of the sophomore year. The student could then spend the last half of the senior year in active work in some selected high school of the state. It would simply be the plan that has been tried so successfully at Brown and Harvard for several years, without the direct supervision of the education department. Only the brighter students could do this, and they would probably be willing to go away in order to gain the larger opportunity for real teaching under normal conditions than they could get in the university practice school. Upon the successful completion of their teaching work, they could return to the university and graduate with their class. Thus they would gain the bachelor's degree, and they would have had a half year of the most practical sort of work all within the space of

four years. Eventually, as conditions improve, this would all be transferred to the graduate year.

In the second place, it may be objected that the teaching force is not competent to undertake this responsibility. Surely among the hundreds of high school teachers in each state, some might be found that had this ability at least potentially. The school examiner, whose acquaintance is wide among the teachers of his state could select a few of the most promising teachers in each subject. These could be invited to attend one or two summer schools, where the professor of practice could show them his point of view and give them a good, thorough-going course in the sort of work he expected them to do. The honor of being selected for this work together with the slight financial emolument that would have to go with each student thus sent out, would be sufficient to attract most of those whom the department wanted. The honor of being thus distinguished by the university would be a good business asset. Within a very few years, under such a system, the university would have a body of teachers for such work that would easily supply its wants.

In the third place, the local objections against this practice teaching are far stronger in the imagination than they are in the reality. Everything depends upon the way the system is tried. The school board of Providence puts such students in the high school and pays them four hundred dollars a year for their work. Harvard has been able to place its students in the surrounding high schools, where they have been entrusted with class teaching for a half year, under close supervision, of course, of a regular teacher. A similar arrangement at the University of Colorado has been able to "save the Boulder schools many who would otherwise drop out." The plan as worked out at Colorado, which has previously been described at some length, has already been tried in some of its details for several years at the University of California with similar success, so much so that several of the elementary schools actually asked the university for student teachers in order that the general average of the public school class might be appreciably raised. With such a scheme in working order, the communities that were selected for this practice teaching would enjoy unusual advantages when they came to appoint new teachers, for they would

virtually be able to try out the new material at no appreciable cost to themselves.

The university would naturally expect to test the progress of the student during the last half year by suitable examinations held at the university at its close, but the report of success in active teaching must necessarily be the weightier factor in determining the final grading for the course.

The application of these suggestions to the practice teaching would not furnish the panacea for all the ills to which we are heir, but it would provide for an enlargement of the facilities for the training of teachers that is capable of constant expansion, that will keep pace with the increasing needs of the schools, and that will save the secondary schools from the incubus of the largely unsupervised practice teaching that is being done by the newly elected teachers, *after* they have received a regular appointment. As a matter of social economy, therefore, these suggestions ought strongly to be urged.

OBSERVATION IN CONNECTION WITH COLLEGE AND UNIVERSITY SCHOOLS OR DEPARTMENTS OF EDUCATION

GEORGE D. STRAYER
Teachers College, Columbia University, N. Y.

OUTLINE

I. The Present Status of the Work in Observation.
   a. Required in most institutions.
   b. Conducted mainly as preparation for practice teaching and for the purpose of making clear educational theory.
   c. Observations in both secondary and elementary schools are common.
   d. Observations are held chiefly in public schools not under university control.
   e. Written reports are commonly required.
   f. Class discussion of work observed by a whole class is frequent.

II. The Place and Significance of the Work in Observation in the Training of Teachers.
   a. The requirements for one entering the profession.
   b. Work in Observation is significant in the strictly professional part of the training required. It bridges the gap between theory and pactice.

III. Guiding Principles for the Conduct of Observations.
   a. Definite problems to be solved.
   b. Training which enables one to see and hear that which is significant.
   c. An accurate record of the data.
   d. Application of data to solution of problems.
   e. Careful supervision of observations.

IV. Variation in Aim and Procedure with the Teaching Experience of the Observer.
   a. For the inexperienced.
      (1) Theory vitalized.

(2) Study of children.
(3) Class room management.
(4) Preparation for laboratory practice.
(5) Solve problems which arise during practice.
(6) Illustrations from outlines for the guidance of observers.

b. For the experienced teacher.
(1) Greater proficiency in teaching.
(2) Demonstration of theory.
(3) Practice in supervision and criticism.
(a) Creation of correct standards.
(b) Types of criticism—Negative, appreciative constructive, destructive constructive, suggestive constructive.

c. For advanced students of the theory and practice of education.
(1) Keep in touch with real situations.
(2) Part of scientific experimental work.
(3) Observation of more than teaching.
(a) Supervision, administration, curriculum of different types of schools, problems of physical welfare, the school in relation to other social agencies.

V. Where Should the Student Observe?

a. In a model school.
(1) For observation of the best work under ideal conditions.

b. In a practice school.
(1) In preparation for practice.
(2) For advanced students studying the problem of the training of teachers.

c. In an experimental school.
(1) As preparation for work in investigation of educational problems.

d. In schools of all types not under university control.
(1) Observation of teaching, supervision, administration, curriculum, and the like.

VI. Significance of Work in Observation for Those Who are Observed.

a. Does not disturb children greatly, if frequent enough.

b. May be very helpful to the teacher, if followed by adequate criticism.

VII. CONCLUSIONS.

a. Work in observation is indispensible since it is through observation that theory is appreciated, and the best basis for professional practice laid.

I. THE PRESENT STATUS OF THE WORK IN OBSERVATION.

The problem which underlies the discussion outlined in this paper is the relation of theory to practice. The fact that we have established schools and departments of education is evidence of our belief in the necessity for theoretical training for the intending teacher. The problem which remains is: How can the transition from theory to practice be most effectively brought about? Any attempt to answer this question involves both the work in observation and in practice teaching, consequently, in the discussion of the work in observation, the writer constantly assumes practice work or previous teaching experience.

In the preparation of this paper, the attempt was made, first of all, to gather data concerning the present status of work in observation in our colleges and universities having departments or schools of education. In each of these institutions the problem has arisen, and from a study of the solutions which have been worked out, we may at least discover what has been found to be administratively possible. In order to get such data as were needed the questionnaire which follows was prepared:

OBSERVATION IN CONNECTION WITH COLLEGE AND UNIVERSITY SCHOOLS OR DEPARTMENTS OF EDUCATION.

I. Of the students enrolled in the department of education this year, how many have taught one year or more?
How many have not taught?..... Total?.....

II. Do you require work in observation as a regular part of your professional course?.....
How many hours observation?.....
During how many years?.....

III. In connection with which courses is observation required?

Subjects	No. of hours per week	No. of weeks	No. of students observing at one time, i. e., one-four, etc., or whole class.	Alone or accompanied by instructor?
1. Educational Psychology.....				
2. Courses in the special method of different subjects.....				
3. General Method.....				
4. Criticism and supervision of instruction.....				
5. Other courses (please name).....				

IV. If you have practice teaching, what is the nature of the observation in preparation for such work?.....
No. of hours?.....Subjects observed?.....
In which grades or years?.....
To whom is the student responsible during his observation in preparation for practice teaching?.....

V. What preparation is made in classes in theory for the work in observation?.....
Do you have a printed or mimeographed outline for the guidance of students in observation?.....
If so, will you kindly send me a copy.

VI. What is the student's responsibility for work done in observation?.....Do you require written reports?....
Do you have class discussions of work observed by a whole class?.....Does the teacher observed participate in the discussion of her work?.....

VII. Where do your students observe? (Check 1, 2, or 3 below).
(1) In the public schools (not under the direct control of the university)?.....
(2) In a model school (free from practice teaching)?.....
(3) In the practice or training school?.....
(4) Or in other type of school (please name)?.....

VIII. Are your observations arranged (Check 1, 2, or 3 below)
(1) With a view to the demonstration of educational theory?
.....
(2) Or, with reference to the development of special methods?.....
(3) Or, as direct preparation for practice teaching?.....
(4) Or, otherwise (kindly specify)?.....

IX. Do you have observation in High Schools?.....
Elementary Schools?.....

The writer appreciates the fact that no such list of answers can adequately represent the work in each of the particular institutions reporting, but he feels sure that enough facts were thus brought together to afford a basis for comparison concerning some of the more important features of the work. Blanks were sent to all of those who furnished data for the studies made by Professors Sutton and Bolton for the meeting of this association in 1906, and, in addition, to all other institutions represented by membership in this society. Fifty-four institutions were asked to furnish data, and fifty-one replies were received.

Table I gives data concerning the student body and the number of hours observation required.

	Students who have taught	Students who have not taught	No. hours observation required
Adelphi	22	59	20
Alabama	6	44	0
Arkansas		30	0
Brown			40–100
Bryn Mawr	0		0
California			*
Chicago	88	99	*
Cincinnati			*
Clark			0
Colorado College			*
Colorado, U. of	30	130	*
Columbia	804	151	20–90
Cornell	10	166	20
Drake			*
George Washington	102	3	*
Georgia			0
Harvard	17†	100†	30–120
Illinois	8	55	45
Indiana			20†
Iowa	125†	150†	*
Johns Hopkins	12	6	0

Kansas	10	100	36
McGill			60†
Michigan			0
Mississippi	40	70	36
Missouri			15
Nebraska	87†	175†	72
New Mexico	1	11	60
New York	550†	12†	20°
North Dakota	30	70	18‡
Northwestern	17	71	0
Ohio State	14	21	48
Oregon	15	35	0
Pennsylvania			0
Rochester			20
Stanford	27	0	*
Syracuse	15	350	20
Swarthmore	6	69	20–75
Tennessee			0
Texas	55	194	*
Tulane	30	27	48
Ursinus	2	19	0
Utah	10	90	36
Virginia	12	0	0
Washington State	42	80	48°
Washington (St. Louis)			0
Wellesley	6	101	25
Western Reserve			0
West Virginia	18	22	40
William and Mary	18	147	66
Wisconsin	95	187	40†

It is evident from the table that in most of our institutions by far the greater number of students who are taking the work in education have had no teaching experience. Indeed, if the figures for Columbia, New York University, and George Washington University, in each of which there are peculiar conditions which make the student body anything but typical for the coun-

†Numbers estimated.

‡For those preparing to teach in elementary schools.

*Indefinite number of hours of observation with practice teaching.

°For those who have not taught.

try at large, be subtracted, the ratio of students who have taught to those who have not taught becomes three to one. It is not probable that this ratio would be materially changed by including the number of students with and without experience from the fourteen institutions failing to report these data.

With regard to the number of hours of observation required there is a very great variation among the several institutions reporting a definite requirement in this work. The minimum seems to be from fifteen to twenty, the maximum as high as one hundred hours. Of those reporting definitely, two-thirds fall in a group requiring from twenty to fifty hours of observation. Doubtless in many of the cases reporting a small number of hours, the student actually spends more time observing school work, the required work being simply the time given in preparation for practice teaching, or in class observation in connection with some theoretical course. It is significant that of the fifteen institutions reporting no required work in observation, all but two report that the problem is being considered and that some provision will be made for observation, and in some cases for practice teaching, in the near future.

Table II summarizes briefly the data collected concerning the courses in connection with which the work in observation is done, and some information concerning the manner of conducting the work.

TABLE II

1. Courses in connection with which work in observation is done.	Number of schools or depts.
a. Educational Psychology	10
b. Special Method Courses	10
c. General Method	15
d. Criticism and Supervision	6
e. Secondary Education	3
f. School Administration	4
g. Principles of Education	3
h. History of Education	2
i. School Management	2
j. School Economy	1
k. Elementary Education	1
l. Kindergarten courses	4

m. In connection with practice teaching only..... 6
(30 reports received).

2. Purpose of the work in observation.
   a. A demonstration of educational theory..... 5
   b. The development of special methods..... 1
   c. Direct preparation for practice teaching..... 6
   d. (a and b)..... 4
   e. (a and c)..... 4
   f. (c and b)..... 5
   g. (a, b, and c)..... 5
   (30 reports received).

3. When do students observe?
   a. With respect to age of children.
      (1) In high schools only..... 6
      (2) In elementary schools only..... 2
      (3) In both high and elementary schools..... 21
      (4) In kindergartens..... 4
      (28 reports received).
   b. With respect to the control of school and kind of work done in it.
      (1) Public schools not under university control..... 26
      (2) Model schools..... 5
      (3) Practice or training schools..... 4
      (4) Beginning college class..... 2
      (5) Preparatory schools of the college or university. 2
      (6) Private schools..... 2
      (28 reports received).

4. Conduct of work in observation.
   a. Preparation.
      (1) General, in theory class..... 22
      (2) Special mimeographed or printed outlines for the guidance of students..... 10
   b. Student's responsibility for work observed.
      (1) Written reports..... 25
      (2) Class discussion of work observed by whole class 20
   c. Number of students observing at one time.
      (1) In small groups (1 to 4 only)..... 10
      (2) A whole class..... 20
   d. Students observe unaccompanied by an instructor 8
   e. Students observe accompanied by an instructor.. 20
   (30 reports received).

Some explanation of Table II is necessary, and brief comment concerning the results may not be out of place. In the first place it seemed inadvisable to attempt to report the details collected in this table in connection with the names of the universities giving the information. The tables required in order to report these data in this way would have covered many pages and would not, on the whole, have been particularly significant. The general tendency is clearly indicated in the table given above.

The figures in Section 1 indicate that the work in observation is conducted mainly in connection with those courses which are given in preparation for practice teaching, namely, educational psychology (which includes child study), special and general method courses, and courses in observation as direct preparation for practice teaching. Section 2 gives additional data in this connection: Twenty out of thirty reporting declare that one purpose of the work is to prepare for practice teaching. (Section 2, c, e, f, and g above).

It seems somewhat surprising that only six institutions report observation in connection with courses in criticism or supervision of instruction. Of those reporting students who have and who have not taught, only one reports all of its students without experience. Men and women who have had teaching experience and who are taking collegiate and graduate work in education constitute a group from whom many of our supervisory officers will be recruited, and it would seem that that institution which does not give practice in the duties of the supervisor is missing a great opportunity for service. Such training involves observation under competent supervision, and in connection with courses in which the problems of supervision and criticism are discussed. Possibly some work of this sort is done in courses not specifically designated as work in supervision.

In Section 3 of Table II which indicates the types of schools in which students observe, the data indicated considerable uniformity in practice. Although it has been assumed that our colleges and universities were concerned mainly in the preparation of teachers for the secondary school, twenty-one out of twenty-eight giving information concerning the type of schools observed report observation in elementary as well as in high

schools. Evidently it is the intention of our departments to familiarize the student with the whole school system, not simply with one selected group of children, or with a subject or two which he expects to teach.

For the most part, observation is confined to public schools not under the control of the institution which provides the theoretical training for the student. It seems probable that the colleges and universities will in time be forced for the sake of the efficiency of their work, to gain control over the schools used for observation and practice. This point will be discussed in some detail later in this paper.

That the work in observation is considered an important part of the student's work, is indicated in Section 4 of the table above. Ten institutions report, that in addition to the general class directions and discussions, special printed or mimeographed outlines are provided for the direction of students in observation. The writer received copies of these outlines from Cornell, Indiana, Swarthmore, and Columbia, and will, in a later section, indicate the scope and purpose of these directions. Students are required in most institutions to prepare written reports of their observations, and in twenty institutions observations are conducted under the direction of the professor of education in the presence of a whole class as a basis for later class discussion. Those institutions which offer class observations in charge of an instructor usually provide or require individual observations as well, while only eight institutions report all observations without the direct oversight of the professor of education.

Possibly this paper should end with this survey of present conditions. The writer knows that every member of the Society of College Teachers of Education is attempting to solve the problem involved in giving adequate work in observation and practice teaching, and he believes that the solutions finally arrived at will be as various as the men proposing them and situations involved. However, it may not be out of place to attempt an analysis of the problem with some suggestions which seem valid both from the standpoint of theory and from the experience which it has been the writer's good fortune to enjoy.

II. The Place and Significance of Work in Observation in the Training of Teachers

We demand today of one who would enter the teaching

profession: (1) A liberal education; (2) Specialization in some field, either with respect to some division of the whole body of knowledge, or with reference to some period of child development; (3) Professional knowledge, consisting of psychology, the history of education, with their applications in general and special method in supervision, in school management, and in administration; (4) Teaching, supervisory, or administrative skill. It may be objected that supervision and administration constitute another or possibly two other professions. The reasons for including them in this discussion are: (1) that the training necessary for teaching is fundamental in preparation for work in supervision and administration, and (2), that our departments of education are training men and women for these more responsible positions.

We are concerned in this paper mainly with the demand for professional knowledge and teaching skill. Professional knowledge is to be made significant through observation and through practice. The art of teaching will always be dependent in a very large degree upon the ability of students to imitate the work of other teachers who are successful. However far we may advance in our scientific knowledge concerning our profession, we shall never be able to substitute the science of education for the art of teaching. But even if we were not primarily concerned with teaching skill illuminated by scientific knowledge, the place of observation in the professional training of the teacher would not be less secure. Scientific inquiry is conditioned by the possibility and by the adequacy of the observations made by the investigator. Our first problem, then, is to inquire concerning the principles which must guide us in the conduct of observations.

III. Guiding Principles for the Conduct of Observations

First of all, observation will be significant in proportion as the observer seeks definite information. The student who goes into a room with a definite problem to solve will probably profit by his contact with the school, while the one who goes into a room merely to see things often goes to sleep mentally, or gets utterly erroneous ideas concerning the meaning and relative importance of the phenomena observed. Outlines prepared for the guidance of students in their work in observation, or care-

ful preparation in class for successive observations are essential to the best work. In general the student should not attempt too much or too difficult problems in the early stages of this kind of work. And that brings us to the consideration of a second principle of control.

Students must be taught how to observe. Did you ever watch a class beginning to use the microscope for the first time? That which is so clear to one who knows how to look and see is wholly beyond the power of the student to observe. The training demanded of one who is to see in the school-room evidences of mental activity, of skill in the adaption of subject-matter to the possibilities of learning on the part of the children, of successful social development, of the technique of class room management is greater by far than that demanded of one who is to learn to observe material phenomena by the aid of a physical instrument.

On the whole, it seems best to begin by having the student observe the more obvious methods of control and management, or possibly merely the physical conditions under which the work is conducted. Later the study of children with respect to physical condition, or with reference to some particular type of response may introduce the student to the more intricate problems which confront the observer. The writer has found that a careful observation of the stimulus afforded through questions asked by the teacher, and of the corresponding responses of the children furnishes a convenient point of departure for a class in general method. The ability to analyze a school situation, discovering its strength or weakness and explaining it by reference to the psychological, sociological, or biological principles involved, comes only after the most painstaking apprenticeship in the field of observation.

If observation is to be made most significant the student must feel that he is to be held responsible for what he has seen and heard. General impressions are quite misleading. Especially for a group of beginners it is essential that they be able to tell exactly what they have observed. This means that careful rather than many notes should be taken by the observer, and that he should be held responsible for the facts by means of a written report or by class discussion which involves an accurate account of at least certain phases of the work observed. Of

course, the emphasis placed upon accuracy of report is not in any way intended to mean that the facts recorded are significant in themselves. Data are gathered and reports and discussions are held in order that some problem of theory or of practice vital to the student participating in the observation may be solved.

The best work will involve a very intimate knowledge of the school by the instructor conducting the observations. Inexperienced observers who go alone to observe schools and teachers with which the instructor in education is not intimately acquainted can accomplish little. Even for experienced teachers the value of the work in observation will depend largely upon adequate supervision.

To summarize briefly: Observation involves, (1) a definite problem to be satisfied; (2) training which enables one to see and hear that which is significant; (3) emphasis upon the necessity for an accurate record of the data observed; (4) the application of the data collected to the better appreciation, or the solutions of problems of theory or practice; and (5) careful supervision by the instructor in education in order that misconceptions shall not arise, and that the real significance of the situation may be made clear.

IV. The Problem of Conducting Work in Observation Varies Both as to Aim and Procedure with the Teaching Experience of the Observer

That the problem of work in observation varies with the teaching experience of the student may be stated as a corollary of the principles of control given above. There is no mistake more fundamental than to suppose that those who have not taught can through observation of good teaching, modify greatly their beginning attempts in practice. On the other hand, there is no single source of improvement or change in the work of the experienced teacher equal in significance to the observation of other teachers at work. The inexperienced student does not see the situation as a teaching problem and it is difficult for him to appreciate fully the theoretical questions which may be raised. The experienced teacher, on the contrary, interprets that which he observes in the light of his experience. There are a thousand points of reference which help him to interpret and judge of the

work which he sees. He is fairly bristling with problems because of the difficulties which he has encountered in a similar situation. Again for the advanced student of theory and practice the school-room observation becomes a laboratory in which the validity of theory is critically tested. Each of these groups the inexperienced student, the experienced student, and the advanced student of the science and philosophy of education present a different set of problems and a vast range of possibilities of realization in the work in observation, and each group will, therefore, be considered separately.

OBSERVATION FOR STUDENTS WITHOUT TEACHING EXPERIENCE

The purpose of observation for the inexperienced student is mainly to prepare him for his practice teaching. In order to do this, it is necessary to have him appreciate fully the educational theory which has been presented. He must also become acquainted with children and study the problems of school management and control. He can to advantage prepare himself by careful observation of the special method of the subject in which he is to begin his work. Again, it will help him to appreciate the significance of his work if he is led to see the work which he does in relation to the whole school.

Theory, whether psychological, sociological, or biological, can never be very significant to one who has not taught except as there is a demonstration which makes the connection between theory and practice clear in the mind of the student. Students will even miss the significance of so simple a psychological theory as that involved in habit formation. It is not easy for them to apply their knowledge of these principles to such school-room situations as are commonly found in the teaching of spelling, arithmetic, writing, music, or gymnastics. It is not uncommon to find students who can recite very glibly their psychology, and yet, who, when taken into the school-room, cannot recognize in the teaching which they see, any application of the theory involved. It is most important in training for an art that the theory be constantly vitalized by illustration and by the demonstration of its validity.

If it is true that the theoretical work of the beginner is significant in proportion as he sees its application in practice, it is none the less true that his work in child study needs to be check-

ed up constantly by an actual study of children in the schoolroom. If practice teaching, or the later regular professional work of the student, is to be most efficient it is essential that he should come to look upon the children in his class as individuals, each of whom is worthy of special consideration and study. It is difficult when the beginner has thrust upon him all of the problems of teaching for him to individualize the children before him, and so it is most necessary that practice in the observation of children, including the diagnosis of special aptitude or deficiency, be a regular part of the work in observation in preparation for teaching.

Many experienced teachers fail in the beginning because they do not know how to work economically. It is not uncommon to find such an one wasting time and even actually creating disorder because of failure to handle such simple matters as the distribution of supplies, or the moving of children from one part of the room to the other. These matters can be observed, and the intending teacher can learn through observation how to handle such situations.

The purpose of such observations as have been indicated as essential in the work of the beginner is significant in proportion as it sends him to his work, able to analyze the situation and to apply his theory to the teaching in hand. The preparation is essentially a preparation for laboratory work, and is to be judged in the light of that type of practice teaching.[1]

Possibly more significant for teaching skill will be the observations which the student makes after he has begun his practice work. He will observe the work of others in order to solve problems which have arisen in his own work. During the period of practice teaching students may to advantage observe and discuss each others' work. He will need to correct faults which are sufficiently manifest but which he has been unable to correct upon purely theoretical bases. Then, too, he will be prepared to grow in his appreciation of theory and in his knowledge of the purpose and significance of the different types of school work. If he feels fairly confident of his ability to handle a group of children, he will become more critical of the material

1 See Professor Dewey's essay on "The Relation of Theory to Practice in the Education of Teachers." The Third Yearbook of the National Society for the Scientific Study of Education.

which is presented and of the results which are secured. It is after such practice that a study of the curriculum can be made to best advantage, and it is only then that the student will be able to see the work of the class room teacher in relation to the larger issues of education.

In the work of these inexperienced students it is especially important that adequate directions be given for the work in observation and that careful reports be required. The outlines prepared for the guidance of students at Cornell, Indiana, Swarthmore, and Columbia, are good examples of the method employed in guiding the students' work in observation.[1] The list of topics which follows will give some idea of the scope and organization of this work. Topics have been chosen from each of the outlines mentioned above.

LIST OF TOPICS OR SUBJECTS FOR OBSERVATION AS INDICATED BY OUTLINES FOR THE GUIDANCE OF STUDENTS

1. The School Program, Curriculum, Attendance, and General Organization.
2. The School-room or School Building, or Hygenic Conditions.
3. The Pupils—Physical Aspects.
4. Psychological Principles in Teaching.
   - Instincts and capacities.
   - Interest.
   - Attention.
   - Reasoning.
   - Individual differences.
   - Memory , association, and apperception.
   - Motor expression; motor activity.
   - Verbal expression.
   - Imitation.
   - Imagination.
   - Habit.
   - Emotion.
   - Fatigue.
5. Discipline and Control, Moral Training.
6. Observations of classes in each of the school subjects.

1 Other institutions report such outlines, but those mentioned above are the only ones to which the writer has had access.

7. The Recitation—or class-room exercises.
   Types of lessons.
   Aims.
   The teacher as a factor in the recitation.
   Students as individual factors in the recitation.

These outlines would not be particularly significant, were it not for the fact that in each case the topics and sub-topics were outlined with suggestions to the students concerning the things to look for. Illustrations from each of the outlines may not be out of place.

Instinct.[1]

1. Name ten instinctive tendencies observed and state the ages when they were prominent—fear, emulation, pride, constructiveness, collecting instinct, modesty, curiosity, etc. Give illustrations of permanent, transitory, and intermittent instincts.
2. What attempt did you notice in the planning of the course of study, or in its development, to cultivate and utilize the good instincts?
3. Give a specific illustration of the cultivation of a good instinct—modesty, pride, imitation, sympathy, etc. Cite an illustration of the inhibition (checking) of a bad instinct—curiosity, fear, pugnacity, etc.
4. Could you detect signs of the growth of some instincts through different years of school life?
5. Observe carefully some social and altruistic instincts and state so far as possible the educational value of each.

OBSERVATION OF CLASSES IN HISTORY AND CIVICS[2]

(a) Questions relating to history.

Place in the Curriculum. What courses were given in history? Were they elective or required? What proportion of the pupils study American history, and for how long?

Was Greek and Roman history taught in intimate connection with Greek and Roman literature.

Were history and civics taught together or as separate courses? If the latter, were they taught by the same teacher?

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1 From the outline prepared by Baird T. Baldwin, Ph. D., Swarthmore.

2 From "Guide to High School Observation" by G. M. Whipple. Cornell Study Bulletins for Teachers No. 2, Published by C. W. Bardeen, Syracuse, N. Y.

Was there any attempt to correlate work in drawing with the study of history?

Method of presentation. Was a text book or books used? If so, what? Was reading assigned in other texts or works of reference?

To what extent, if at all, was use made of the 'problem-setting' or the 'topical' method? Did it supplant the use of a text book?

Was any attempt made at research work, in the sense of consultation of original sources, hunting up the facts of local history, etc?

Were discussions or debates held in the class?

Content and type of course. Was ancient and medieval history studied in preference to, or to the exclusion of, modern history?

Was the history of foreign countries studied in preference to, or to the exclusion of American history? If so, why?

Did the study of American history cover the same ground that had previously been studied in the grades? If so, how did the high school course differ from the grade course—in the selection of material, in the complexity of the problems studied, in the greater emphasis on casual relations of the principles involved, in the methods of study, in the mere increase of detail, or in what?

Was overmuch time apparently given to the consideration of certain periods or to details that were relatively unimportant, i. e. did the text or did the teacher exhibit lack of perspective?

Chronological relations. What principle seemed to determine the number and kind of dates selected to be learned? Were too many dates required? Too few? Was the learning of a prescribed list of dates made an independent exercise? Was any time spent in developing a systematic chronology so as to insure correct temporal perspective? Were any chronological charts or other devices employed to fix important dates, periods, or sequences of events, e. g., the campaigns of the Civil War?

Geographical relations Was the study of the history of a country or section preceded by a careful study of its geographic features? Were adequate maps employed? Were any maps drawn by the pupils?

Did the teacher take measures to associate historic events

with the places where they occurred? Did he, for instance, adopt the plan of assigning essays on the historic scenes clustering about a given locality, as "Lake Champlain in History," or "Historic Landmarks of Salem and Vicinity?" Did the teacher appear to have visited personally the localities under discussion?

Was any specific study of the physiography of countries or sections of countries undertaken in order to show the influence of soil, climate, food supply, configuration of the country, and other factors in shaping history, e. g., effect of the geographic isolation of England, effect of the Nile on Egyptian civilization, effect of the climate and geography of Greece on its history, effect of the situation of great cities like London, Rome, and New York on their historic development?

Logical or causal relations. Montesquieu, in his "Spirit of Laws," asserts that "the course of history is on the whole determined by general causes, by wide spread and persistent tendencies." Guizot, however, remarks that "nothing tortures history more than logic." Was the teacher skillful enough to bring out these fundamental causes and broad tendencies without falling into the error of torturing historic truth by the imposition of debatable doctrines and interpretations of his own? Were the pupils made to do enough thinking to avoid the tendency of reducing history to mere memoriter work?

It is commonly agreed that the American Union in its present proportions would have been impossible without the invention of the steam engine and the telegraph. Was the effect of *invention and industrial progress generally* in shaping the course of history clearly brought out?

Training—mental, moral, and social. Professor Jenks in his "Citizenship and the Schools," regards as of the greatest consequence in the training of citizens, "the cultivation in our schools of the spirit of impartiality, which gives sound judgment, and a feeling of personal responsibility." Was the teaching of history so conducted as to inculcate this spirit of toleration as a prerequisite for the formation of sound social judgments? Were the pupils, for instance, brought to see that there were arguments on both sides of such questions as precipitated the War of the Revolution and the Civil War, or were, on the contrary, partisanship, sectional or racial pride, fostered by the manner of presentation?

Were pupils taught to distinguish between facts, and opinions about facts or interpretations of facts?

Was history so taught as to inculcate ideals and standards of honor, worth, and integrity?

In particular, was history so taught as to stimulate pupils to take an active and intelligent interest in the conduct of civil affairs?

Teachers' qualifications. Hinsdale enumerates the following as essential qualifications of the teacher of history: (1) Familiarity with the subject-matter and a good sense of perspective and proportion, (2) a desire to state and point the truth impartially and without bias, (3) enthusiasm for the subject, (4) ability to tell a tale in a pleasing way and in clear and simple language, (5) a retentive memory, (6) a vivid imagination, (7) sound judgment and an insight into character, (8) close touch with current affairs, including acquaintance with civic institutions and knowledge of political economy, (9) personal familiarity with historic localities, (10) some knowledge of antiquities, and a wide acquaintance with general literature. Which of these qualifications did you see exhibited by the teacher? Did any of them appear to be lacking?

(b) Questions relating to civics.

Was any text-book employed? If so, what?

Was there any formal study of economics?

Was there discussion of current political issues, general or local? If so, was this discussion confined to classes in civics, or made a general school exercise, e. g., current events, talks, etc.?

Did instruction deal first with local, state, or National government? Which of these received most attention? Which is most important in the high school?

Was sufficient attention given to the line of separation between State and National authority?

Was study made of political organizations and political machinery—of parties, caucuses, conventions, etc., and of the part played by them in our government?

Was any attention given to the comparative study of political institutions and forms of government, e. g., of France, Germany, England, or of Greece and Rome? Was the pupil brought to see that other forms of government than our own may exhibit some merits?

Was the evil as well as the good in present social and civic conditions definitely brought out, and was there any stimulating discussion of the remedies therefor?

Was any attempt made to study the school as a social agency in the community, e. g., its support, its benefits, its defects, etc.?

Did the class or the school as a whole engage in any activities that would allow the practice of social or civic virtues, e. g., organized philanthropy, formation of a charity society, 'Street-cleaning Brigade,' etc.? In particular, was the 'School City' or any similar form of self government tried, and if so, with what success? Report in detail.

THE METHOD OF THE RECITATION[1]

(a) Note the introduction to the lesson. See if the teacher brings out the connecting links with the lesson or lessons.
(b) Just how is the relation of the old to the new developed?
(c) Is a logical order maintained in the development of new points? Be able to see just how.
(d) What is the teacher's method of getting the pupils to be self-active and spontaneous?
(e) What is the effect upon the class of the teacher lecturing, manipulating apparatus?
(g) Observe whether the lesson is developed by induction or deduction, whether it is devoloped topically, or whether the question and answer method prevails? If the latter is used, study the power of the teacher as a questioner. Were the questions well distributed and to the point? Direct or indirect?
(h) Was the objective method employed?
(i) What use was made of drill and review, and how was the work of the hour gathered up at the close?

ASSIGNMENT OF NEXT LESSON

(a) Was it definite and clear?
(b) Were unnecessary difficulties removed?
(c) Was interest aroused in the assignment?
(d) Was the part adapted to the class's condition?
    1. As to knowledge?
    2. As to time to prepare?
(e) Did the teacher show that he was perfectly familiar with the lesson before assigning it?

1 From the outline prepared by Professor E. E. Jones, of the University of Indiana.

THE PUPILS.[1]

I. Physical Aspects.

A. The senses in general.

a. Does any pupil depend to a marked degree upon some one sense?

b. Are there any pupils who seem unable to learn without the use of objects or illustrations?

c. What kind of aids and illustrations seemed to be most helpful?

B. Sight.

a. Do any of the children have eyes that are diseased or that look strained? What are the symptoms?

b. Are there any evidences of defective vision in any members of the class? What are they?

c. Are pupils with defective vision seated where they can work to the best advantage?

References: Shaw, School Hygiene, Chap. IX.

Rowe, *The Physical Nature of the Child*, Chap. II.

C. Hearing.

a. Does any pupil seem stupid and inattentive, or sit with his mouth open?

b. Is there any pupil who must frequently have questions repeated, or who turns his head so as to listen with one ear rather than the other?

c. Is there any pupil who is slow in following commands, seeming to wait to see what his companions do before beginning for himself?

d. Are pupils who are hard of hearing seated so as to have the most favorable conditions for working?

References: Shaw, *School Hygiene*, Chap. IX.

Rowe, *The Physical Nature of the Child*, Chap. III.

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1 From an outline prepared by Lyda B. Earhart, Ph.D., Instructor in Elementary Education in Columbia University.

Thorndike, *Principles of Teaching*, Chap. II.

D. Posture.

a. Does any pupil keep his head on one side?
b. Does any pupil keep his head thrust forward?
c. Are there any crooked shoulders?
d. Does any pupil habitually sit or stand in a poor position?
e. If a child sits in an incorrect position, is it because the desk and seat are not properly adjusted?
f. If poor posture in the child observed is not due to the seat and desk, to what is it probably attributable?
g. What is the teacher doing to correct the incorrect postures of pupils?

References: Shaw, *School Hygiene*, Chap. VIII.
Rowe, *The Physical Nature of the Child*, Chap. X.

E. Fatigue.

a. Does any pupil show marked symptoms of fatigue or languor? What are the symptoms noticed?
b. Is the fatigue chronic, or is it due to some special occasion or exercise?
c. In case the entire class is fatigued or listless, is its condition due to work or to the state of the air in the room?

References: Shaw, *School Hygiene*, Chap. XI.
Rowe, *The Physical Nature of the Child*, Chap. VIII.

OBSERVATION FOR THE EXPERIENCED TEACHER.

For those students who have had experience in teaching, we aim not only for greater proficiency in teaching, but also to train them to act as leaders of others who have been less fortunate. Our colleges and universities are training constantly a large group of people who will, soon after they leave the courses in education, occupy positions in which they will be expected to organize and direct the work of other teachers. Observation for this group of people will be much more significant than for

those without experience. They will judge the theories presented in the light of the experience which they have already had, and the observation which is conducted for them may demonstrate the validity of that part of the theory which they are inclined to question. Here, possibly, is one of the greatest arguments in favor of a model school under the control of the Department of Education. We shall have more to say of this later. These students need observation in order that they may see in the work of others the solution of problems which have been for them insurmountable. Such students realize the faults and weaknesses of their own work and are anxious to discover how these difficult problems can be met.

Observations should, of course, be followed by practice work which will enable them to satisfy themselves finally of the validity of the theory and practice for which the theorist stands.

This acquaintance with the best practice, through careful observation and criticism, may prepare for the work which such students are to do later in training other teachers either as training teachers in normal schools, or as supervisors. Is may not be out of place to suggest that many experienced students who have had actual practice in such supervisory control, still need careful training to fit them for their work, and that actual observation and discussion of school-room situations furnish the only proof that we can secure of an understanding or appreciation of the theory which has been presented.

Those who evaluate the work of other teachers all too commonly have a single standard of efficiency. This standard is sometimes a very narrow one such as discipline, successful drill work, or the like. Through observations conducted by one who is master both of the theory and of school-room procedure, it is possible to train these students to observe critically the different phases of the work. They may come to see that there are times when the criterion which applies chiefly is that which has reference to formal work. Again, that judgment is to be passed with respect to the opportunity for constructive thinking. At another time æsthetic appreciation and the means to be employed to secure such a result must be kept in the forefront of consciousness, and so for other phases of school work.

For the student who is to prepare to direct others, observation may help also to develop a technique of criticism. He

learns through such work that a mere statement that work is good or bad is of little value to the teacher. Concerning criticism of a positive sort, he may come to appreciate the fact that until he has gained the confidence of the teachers his main function may be to indicate his appreciation of that which is good, and what is more important, make clear his reasons for such appreciation. He should discover through this practice in observation and criticism, the uselessness of destructive criticism unaccompanied by constructive work which will enable the teacher to remedy the defect. Finally, it is possible that he may come to realize that supervision or criticism of the teacher's work involves suggestion which will enable the teacher to grow in efficiency beyond that which she has previously been able to demonstrate.

Some of our institutions are now providing courses in supervision including work in observation which aim to secure the results indicated above. Students, accompanied by an instructor, observe work and meet together for discussion, which is conducted for the purpose of developing the technique of criticism and power in its application.

OBSERVATION FOR ADVANCED STUDENTS OF THEORY AND PRACTICE

For the more advanced group of students, those who are to be critics of education, both with regard to theory and practice, observation is essential in order that they may keep in touch with the actual situations concerning which they philosophize. Still more significant, possibly, is the fact that the observation may be conducted with reference to scientific experimentation. Progress in education must in increasing measure be dependent upon well-planned and carefully-executed experiments. In the beginning our advanced students will be greatly profited by observing the conduct of the work as it is carried on by a proficient investigator. Much of this higher type of work must, because of the situations with which we deal, be conducted by means of careful observation of conditions as they commonly exist.

For this group of people, observation is something more than mere critical survey of the teacher's work. It will involve careful investigation of practice with regard to supervision, administration, the curriculum of different types of schools, the

problems of physical welfare, and a careful consideration of the school in relation to other social forces. The one who is to do constructive work in education must know in a broad way current practice in all of its excellence and deficiency. The acceptance of whatever contribution he has to make will be conditioned by his ability to indicate to those who are in control of our school systems, the need for change and the validity of the remedy which he suggests. Such insight is possible only to one who has observed critically. Some of our graduate courses in education are now attempting observation of this sort..

V. Where Should Students Observe?

THE MODEL SCHOOL

One of the most important problems to be considered in the discussion of the problem of observation is the place where observations shall be conducted. As reported in the first section of this paper, most of our colleges and universities are today using public schools not under university control, for this kind of work. It may seem superfluous to point out the unsatisfactory nature of such a situation. While it may be argued that the beginner is helped by seeing things as they actually are, becoming acquainted with situations which he will later have to meet, yet one cannot fail to question the wisdom of allowing a beginner to observe work which may be of an indifferent or even poor quality. It would seem that both from the standpoint of vitalizing the theory which is presented and as a preparation for practice work, that the student should see only the very best teaching that can be provided. The teacher of theory should, on occasion, be able to direct his students to that teacher who is doing just the type of work which he is insisting upon. In the public school it is difficult at best to control the situation in any such way, and it may even be possible that the practice which the student sees there may create in him false ideals and give him suggestions concerning practice which he will later need to overcome. Of course, the supposition is, that a school under university control for the special purpose of observation would have on its staff only the best teachers obtainable, that it would be equipped in the best manner possible, in short, that it would present as nearly possible ideal conditions. Such a school would probably have the additional advantage of nearness to the university.

THE PRACTICE SCHOOL

It would seem advisable, however, to have more than one type of school. The model school, advantageous as it would be for beginners and for experienced teachers, could not well retain these advantages and at the same time offer sufficient opportunity for practice work. This combination has been attempted by normal schools and by some of our colleges and universities, usually with unsatisfactory results. However strong the training or critic teachers may be, the fact that the children are constantly subjected to a variety of teaching by those who are in training, means more or less disorganization and discontinuity in the work. A practice school is probably never a typical school.

The model school, if it be kept as such, will demonstrate all that is well established in educational practice, and will furnish opportunity for observation both for the inexperienced, and for those who seek training in supervision. For practice work a practice school with a staff of critics or training teachers who are specially qualified for this type of work, and controlled as to organization and curriculum by the members of the university staff in education, will afford opportunity for practice work for the inexperienced student, and a chance for the more advanced students to study the problem of training the teachers. The student preparing to teach in the practice school should spend at least fifteen or twenty hours in observation before beginning to teach.

THE SCHOOL FOR EXPERIMENTATION

Another type of school, or at least another type of work, is demanded. Progress in education depends upon experimental work conducted by competent investigators and continuing, if need be, through a period of years. For the proper conduct of such scientific work a large school with more than one class of the same grade, with a non-selected group of children, and with a staff of competent teachers is essential. Attempts have been made to combine the practice and experimental school. This attempt has not been satisfactory largely because the demands of practice teaching are not compatible with scientific investigation. It may be argued that the model school could properly serve this purpose. Here again the difficulty is, that when the model

school becomes a school of experimentation it ceases to be a model school and ceases to serve to the best advantage the students who need the observation afforded by a model school. In an experimental school it should be possible to test any method of work vouched for by any competent investigator in the field of education, changes in curriculum should be attempted and the results noted, a shorter school day, a condensed elementary course of say possibly six years, psychological experiments with regard to child development and with respect to methods of teaching, plans for elasticity in grading and promotion, and like experiments should be the order of the day. A school in which such experiments were being conducted would not be understood by any except the more advanced students of education, and they are the only ones who could be expected to profit greatly from the observation of the work therein conducted. What the institute of medical research is to the profession of medicine, the experimental school may become to the profession of teaching. The first steps in experimental work in education will be found in careful observation and study of the work done in the experimental school.

SCHOOLS NOT UNDER UNIVERSITY CONTROL

When the university does not have schools under its direct control, the work in observation must, of necessity, be done in whatever schools are most available, whether public or private. For inexperienced students such observation should select the best teaching available. For the experienced teacher where the observation aims at the better understanding of theory or the improvement of practice, the teaching must be of a superior sort. For experienced teachers who are preparing to do supervisory work, the observation of a great variety of work under dissimilar conditions may prove helpful. The advanced student will, of course, observe the various types of schools under public or private control, with reference to teaching, supervision, administration, the curriculum, and the like. The great difficulty in conducting work in observation in schools not under university control is found in the fact that the one conducting the work cannot ordinarily control the situation. He must take what he can get, and make the best of it. He may be considered an intruder by teachers and pupils. Many of the insti-

tutions reporting observations in schools not under university control, stated in their reply to the questionnaire sent out by the writer, that they hope soon to have their own school, a condition of affairs which they consider superior to the present plan.

SIGNIFICANCE OF OBSERVATION FOR THOSE WHO ARE OBSERVED

We cannot dismiss the problem without a consideration of those who are observed. Objections may be raised against the plan of work in observation indicated above on the score that it is detrimental to the best welfare of the children involved and exceedingly hard for the teacher. As paradoxical as it may seem, the above indictment is true only when observations are infrequent. In a school in which observations are very, common the writer knows from personal experience, that the children scarcely look at the thirty-five observers who are ranged round the sides of the room. Nor do the teachers object. A teacher recently remarked that she wished the class could come two days in succession in order to get a better view of the work. She expected a careful criticism of her work and was anxious to get the most help possible from the experience. If observations mean helpful criticism from the instructor conducting the observation, the teacher will find in them the tonic which comes from earnest endeavor. The point to be emphasized is that the observation is not simply for the benefit of the observers, the teacher has a right to demand that it be followed by criticism which will mean professional growth for her.

VII. Conclusions

The work in observation is one of the most important elements in the professional training of the teacher. Whatever decision we may reach with regard to the province of the college or university in furnishing adequate practice as a part of the professional course, we can never do away with work in observation; for the inexperienced teacher it makes a more adequate appreciation of the theory possible and furnishes the only adequate preparation for practice; for the experienced teacher it may serve to stimulate to new endeavor, or to provide the experience in supervision and criticism which is essential as a preparation for work in organizing and directing the work of others; for the advanced student of the theory and practice of

education it ought to mean sanity of view, and the first step in scientific experimentation.

In the conduct of the work in observation emphasis must be placed upon adequate preparation and careful supervision. If growth in the appreciation of educational theory or power in its application is to result, the observer must be trained for this particular work, he must go into the school-room with definite problems, and he must be held responsible for the work either in written reports or in class discussions. Three types of school are essential for the most adequate work, a practice school, a model school, and an experimental school. Model teaching might be done in a practice school but in most respects the situation will not be normal, and consequently will not furnish ideal conditions for the observation of the best in current practice. The experimental school is essential for the proper conduct of a large part of the scientific work which is demanded in the field of education, and observation in such a school is fundamental for the advanced student.

Finally, it may not be out of place to remark, that in work in observation, conducted for various purposes and in many different situations, lies the possibility of close contact with the schools which is essential for the growth and sanity of the professor of education.

PRACTICE TEACHING AT BROWN UNIVERSITY

WALTER BALLOU JACOBS, A. M.
Professor of Theory and Practice of Education, Brown University

The method of practice teaching in force at Brown University had its initiation in the Report of the Committee of Fifteen. The part of the report of that committee which deals with practice teaching was written by Horace S. Tarbell, then superintendent of schools in the city of Providence. In that report the plan for practice teaching in the elementary schools which was then employed in Providence, was approved, and in the second part of the report a similar plan was advocated for the training of secondary school teachers. The report said, "Such a training school for secondary teachers in connection with Brown University and the Providence high school is contemplated for the coming year." The plan was inaugurated in the fall of 1895, and has been continuously in operation since that time, so that it is now completing its fourteenth year.

From the first the guiding principles which have been followed have been these:

1. The practice teaching must be under actual class room conditions, and must cover a long period, not less than one year.
2. The practice teaching must be open only to graduate students who have previously pursued courses in education, and not to undergraduate students.
3. The practice teaching must be a part of the University work and must count towards a degree as laboratory work in other departments counts towards a degree.
4. The pupils in classes under student teachers must have conditions for their work at least as good as those under the average teacher in the school.
5. The work must be so arranged that it shall be of advantage to the general system of the city schools, to the individual schools, to the student teachers, and to the University.

The development of the system has been a slow but steady growth. Some mistakes have been made, which had to be corrected, but on the whole there has been little variation from the principles which were laid down at the beginning. The

practice teaching which was begun in secondary schools for the preparation of secondary school teachers has been extended to similar work in the elementary schools for the preparation of elementary school teachers who are college graduates. A description of the work being done should consider these two fields of work separately: First, practice teaching in high schools; second, practice teaching in elementary schools.

PRACTICE TEACHING IN HIGH SCHOOLS

Practice teaching in the high schools is open to two types of student teachers. Those of the first type receive remuneration for services rendered the schools. Those of the second type do not receive any remuneration. Those of the first type teach in the school for somewhat more than half time each day. Those of the second type teach or observe one period each day. Each student teacher is assigned to a supervising teacher to whom the student teacher is immediately responsible for his work, and who has immediate oversight over the work of the student teacher.

Student teachers of the first type at once on beginning their work have the status in the school of regular teachers. Classes are assigned to them and they are responsible for the work of these classes. They are in continual consultation with their supervising teachers as to the assignment of the lesson for each day, as to the method to be employed in teaching, and as to all other methods of dealing with the class as a class and as individuals. A written plan for each lesson is made out by the student teacher. These plans are kept in a plan book, and are subject to the criticism of the supervising teacher. Experience has shown that it is not best to assign to student teachers classes in several subjects, but that it is best to limit the work to one subject, or at the most to two subjects at the same time. The assignment of several divisions of the same class in one subject has given good results. In this way time is given for careful preparation for the lesson, both as to subject matter and as to the method to be employed in teaching. The student teacher also has more time for his other work at the university. The subject in which the student teacher is to teach is chosen as one in which his scholarship and taste especially qualify him to teach, or to be more exact, the student teacher is chosen be-

cause he is fitted to teach such and such a subject. The classes assigned to student teachers are the same from year to year, so that the student teacher places are kept open, and there are vacancies to be filled each year.

Once each week the student teacher teaches each class in the presence of the supervising teacher. A basis is thus given for criticism and suggestion. Once each week the supervising teacher teaches the class in the presence of the student teacher. Various methods of observing have been tried, but this has proved by far the most satisfactory. The supervising teacher teaches under the identical conditions under which the student teacher is teaching, and deals with exactly the problems with which the student teacher is dealing. As the supervising teacher is always a teacher chosen for excellent ability, the pupils have the advantage of coming immediately under a teacher more skillful than the average teacher. Further, as the student teacher has few classes, he is able to give much time to work with individual pupi's. On the whole the pupil in the class of a student teacher has better instruction than the pupil under an average teacher in the school.

The time taken from teaching by the supervising teacher for this purpose is made up to the school by the hours which the student teacher teaches more than his remuneration calls for under the usual schedule of salaries. The supervising teacher receives a small sum from the university for his oversight of the student teacher.

Student teachers of the second type are not assigned to separate classes, but they are assigned to a particular class of the supervising teacher. Their teaching and observation is for the most part confined to the work of this class. At first they observe the work, correct papers, and become acquainted with the individuals of the class. Then they teach a part of the lesson while the supervising teacher is present. Their responsibility and the amount of teaching is gradually increased, until finally by the end of the half year the class is quite fully given over to their charge. They often do work with individuals and with groups from the class who need special instruction. At the beginning of the second half year a new division may be assigned them for which they will be responsibly much the same as student teachers of the first type. This depends upon th

needs of the school as well as upon the success of the student teacher in the first half year.

Once a week the professor of Education visits each student teacher of either type, observes him at his work, confers with him personally, and gives him such advice as seems necessary. Each week the student teacher reports upon a blank[1] prepared for that purpose and in some detail as to the work of each class. Once each week all student teachers in high schools meet in general conference. The problems which have arisen during the week are discussed, and the proper solution considered. While the teaching done by each student teacher is in a single subject, or at most in two subjects, the discussions as to methods cover the work done in all the chief subjects taught in the high schools. At the proper time each student explains the methods which he is employing in his particular class and subject, and gives the reasons for these. In addition to this a seminary is conducted once a week in "Methods in Secondary School Studies and the Organization, Equipment, and Management of Secondary Schools." Student teachers in high schools are required to take this course. Five or six seminaries are given to each of the following:— Latin, Modern Languages, History, English, Mathematics, Science. There is some visiting of classes in other subjects than the particular subject in which the student teacher is being trained, but not much emphasis is placed upon this. If it seems desirable in a particular case to emphasize a method of work or animus towards a class, a student teacher who seems to be lacking at these points may be sent to visit a teacher who especially exemplifies what it is desired that the student teacher acquire. In addition to the work described above, all student teachers attend a seminary in Education which meets once each week and studies current educational problems. The subjects studied are not limited to the field of high school work but embrace the whole field of educational activity. The entire work done by the student teacher in the department of Education constitutes a major for the Master's Degree, that is, it counts for three-fifths of the work required. In this amount the practice teaching, and the conferences, discussions, etc., pertaining to it count as a three hour course for one year, or one-fifth of the fifteen hours required for the Master's Degree.

1 The blank used is shown on page

PRACTICE TEACHING IN ELEMENTARY SCHOOLS

The city of Providence maintains a system of apprentice teaching as a part of its system of elementary schools. A "critic teacher" has under her two regular school-rooms of different grades. To the critic teacher is assigned two "pupil teachers". Both of these pupil teachers may be from the normal school, or one of them may be a college graduate pursuing work at the university. As such a student teacher is present at the school during its full session, the work at the university is necessarily small, and is confined to work in Education. During the first half year the student teacher teaches in one of these two grade rooms, and during the second half year in the other grade room. Her work and the work of the room is under the immediate charge of the "critic teacher" and conforms to the regular work of the city system. The "critic teacher" advises the student teacher as to all the details of her work, observes and criticises her work, teaches the classes in some of the subjects herself while the student teacher observes. The student teacher receives a small salary for services rendered. Although this is small, it is found sufficient to make the training attractive to some college graduates, and through this training they are continually entering the schools of the city as regular teachers.

The student teacher is visited while at her work once each week by the professor of Education. Such criticism and advice are given as seems advisable. Once each week all student teachers in the elementary school meet in a general conference. This conference is similar in character to the conference of student teachers in the high schools but, of course, deals with the problems of the elementary school. The methods of teaching different subjects in the elementary school are considered, and also the organization of these subjects into a curriculum.

By a second arrangement student teachers teach and observe one hour a day in the elementary schools. Like the other student teachers they are assigned to a supervising teacher. In this case the supervising teacher may be a grammar school principal. They first observe the work in a particular class; then teach more and more until they teach regularly. They are moved freely from grade to grade more than are the other student teachers in the elementary schools, although the plan

is still to make the student teacher thoroughly acquainted with a few grades and a few subjects rather than give him a superficial knowledge of the whole. Such student teachers may be college graduates or they may be approved seniors in college. The purpose is to open these places to men rather than women, and to fit these men to become principals of elementary schools, or superintendents. These student teachers also are visited once a week by the university, and they meet once a week in the general conference for teachers in the elementary schools. They receive no remuneration for their services. They are appointed by the professor of Education and approved by the superintendent of schools.

Certain features of the system which has been described require special consideration.

First. The system does not admit of a large number of student teachers being trained in a single school. A school can assimilate with advantage to the pupils only a small number in comparison with the total number of teachers. Education deals with human life, and the interest and welfare of each child must be considered. If an apprentice is learning carpentry, or plumbing, or bricklaying, he may spoil material in learning his trade. A method of training apprentices which allows this may be economically advantageous. In teaching, however, the method of training must not do harm to the material. It may be doubted whether any system can be devised by which a large number of teachers can be trained in one school without impairing the efficiency of the school. Efficient training then requires close connection between a university and a large school system. Brown University and the city of Providence are favorably situated for such work and advantage has been taken of that fact. Universities not thus situated in the midst of a large urban population must transport their practice department to such a center, just as medical schools must go where hospitals are rather than bring hospitals to the university campus. The advantages gained largely arise from the fact that the training is under conditions to the smallest degree artificial. The art of teaching is learned under quite the conditions under which it must be practiced.

Second. The system does not give a practice school under the direct control of the university. This, indeed, is not desir-

able. Student teachers are trained in the actual work of an excellent system of schools. They are not trained to go out as reformers. There is too general a conception that teachers must be trained in an experimental school. Indeed older teachers and the general public have a more or less emphatic impression that they are so trained. Student teachers are not to be trained to go out and teach experienced teachers how to teach, but to aim to teach as well as the experienced progressive teacher. There is abundant opportunity for the study of theory and experiment and abundant need of it. The other work of the student teacher should care for this. In his practice teaching he must learn to work harmoniously with others, and in a way consistent with the best purpose which dominates a system.

Third. The supervising teachers are not under the direct control of the university. Although they are among the best teachers of a great school system, in many cases they are ignorant of the theories of education taught at the university. They may even employ methods which are criticised by the university. The student teacher must learn that because we hold a theory as to what is best, it is not always wise to put that theory into practice at once and under all circumstances. The student teacher sees that there is more than one way of doing a thing, and so gains independence of judgment. The problem of training teachers by practice teaching is not the same as that of teaching primary pupils. In the one case we are dealing with children, in the other case with adults. In the one case we are teaching what is accepted by everyone as established truth; in the other case we are dealing with what is opinion rather than established truth. It is more important that such teaching should be stimulating, than that it should be dogmatic.

Fourth. The system calls for a long period of practice teaching. Too much emphasis cannot be laid upon the importance of this. We teach our students that we learn to do by doing, and then proceed ourselves to overload our courses with theory and undigested material. The proper training of the teacher is a slow process. We bring disrepute upon ourselves by sending out students who are only half prepared to teach. The haste of the student to get to work, the haste of the community to get the teacher, the low wage which the teacher will receive at the beginning of his work, all tend to hasten unduly

presents to be executed in duplicate by their respective Presidents, both hereunto duly authorized, this the day and year first aforewritten.

Signed and delivered in the presence of

BROWN UNIVERSITY

E. S. WICKETT. by W. H. P. FAUNCE.

THE SCHOOL COMMITTEE OF THE CITY OF PROVIDENCE,

HENRY B. ROSE, As to F. R. by FREDERICK RUECKERT, *President.*

BROWN UNIVERSITY—STUDENT TEACHER'S REPORT

HIGH SCHOOLS

Class; Subject.....Grade.....
For week ending.....190...
Work covered by the class during the week.
Textbook,.....p.....to p.....
Class taught in presence of Superivising Teacher.....
Class taught by Supervising Teacher.....
Criticisms and Suggestions from Supervising teacher

On the back of this blank, report on each of the following topics. Let each statement be specific and concrete. Use numbers corresponding to the numbers of the topics.

I. SCHOLARSHIP:—1. General character (compare with last week). 2. Topics well learned. 3. Topics poorly learned. 4. Measures employed with class as a whole. 5. Measures employed with individuals. 6. Points to be aimed at next week. 7. Measures to be employed.

II. DISCIPLINE:—1. General character (compare with last week). 2. Strong points. 3. Weak points. 4. Measures employed with class as a whole. 5. Measures employed with individuals. 6. Points to be aimed at next week. 7. Measures to be employed.

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Student Teacher

The Supervising Teacher is requested to examine this Report. Please check with initials.....